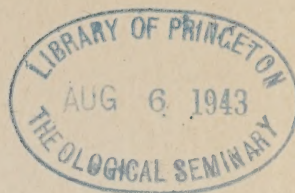


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THE CRUX OF CHRONOLOGY

The Crux of Chronology

An Essay
to Establish the Life-Time of
JESUS CHRIST
and
to Stabilize the Date of Easter



By
✓
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INTRODUCTION

Like all Gaul, all chronology pertaining to the life and times of Jesus called the Christ is divided into three parts, representing in these three sections the three schools of chronology or systems of time-reckoning applied to that particular period with a view to reducing the life-time of Jesus to certain well-defined limits. We shall confine our attention to those three systems because they will furnish all the confusion and chaos that can be desired for the production of a chronological criss-cross puzzle of the first magnitude, and may well be called the *Crux* of sacred chronology.

The three sections or systems of chronology thus alluded to originate, first, by positing a certain principal and preferred theory, and then by placing the departures from this principle to the right and to the left, or, to be more exact, to the up and the downward trend of these divergencies alongside of the well-nigh universally ruling and reigning theory. The one leading view and the additional two diverging views, therefore, present an array of three hostile and everlastingly conflicting forces, moving on through all the ages of ancient history until two of the opposing lines lose themselves in the sequence of the period which must be marked off for the time in which the life of Christ necessarily falls in the commonly accepted mode of reckoning; the anterior view terminating with the reign of Antoninus Pius, the ulterior in the reign of Caius Caligula.

But, before they thus lose themselves in the common channel, let it be repeated, the three modes of reckoning the time which must have included the life of Jesus run alongside each other like three distinct and separate canals, sharply opposed and operating against one another, each claiming to give the true date for the same event at a distance of one year or two years from the central or main line of time, and maintaining this contraventional attitude throughout the duration of all the ancient epochs and eras previous to the appearance of Christ. The three systems of chronology thus referred to are the commonly accepted scheme attributed to Petavius, the anachronistic scheme introduced by Dr. Farmar Jarvis, and the metachronistic scheme suggested by Dr. Gustav Seyffarth. The first, most widely disseminated and most loyally received by the vast majority of chronologists, connects, for instance, with the Olympiads, the stamina of Greek chronology, as if these noted contests had been originated in 776 B.C. The second, introduced by Dr. Jarvis and adopted by Mr. Page, Prof. Totten, and others, connects with the Olympiads

as if, projected into the past from their re-inauguration in 1896 A. D., they had been instituted in 777 B. C., and continued without a break in the count to the present-day series of the Games. The third scheme of reckoning time, brought forward by the Egyptologist Dr. Seyffarth and followed by a few chronologists of note, connects with the Olympic stadia as if they had been started in 774 B. C., coming down to us with an aberration of three or five years according to the count of Africanus, Censorinus, and Theon, or the catalogue of Josephus, Eusebius, and others. Since, therefore, none of these conflicting schemes or systems of chronology is true to the facts in its entirety, and every one of them has certain elements of truth and points in its favor, it is obvious that we shall have to construct a consistent scale of time before we can measure by it, or upon it, the life-time of any man or determine upon its body the precise place of any matter-of-fact or event.

Now, in our humble attempt to establish the time-limitations of the life of Christ, and to stabilize the date of the resulting Easter-day, it is incumbent on us, in the first place, to seek a determinant of time in general to serve as a common means of tying together all the various strands of time-measurement once in use and now to be re-used in our effort to fix the life-time of Christ and the first inauguration of Easter. To this end we shall briefly consider the construction and character of the so-called Julian Period.

VOLUME I. CHAPTER I

THE JULIAN PERIOD

As the railroad engineer avails himself of a flimsy, almost gossamery kite-string to pull first a stronger cord, then a rope, and then a powerful cable across an otherwise impassable chasm, in order to hang on it a mighty suspension bridge both beautiful to the eye and serviceable to the wheels of commerce, so the chronologist, using only the numerical line of years, employs the measure of time known as the Julian Period as a common stock on which to graft all the other eras, more or less imperfect, which were used in real life by the people of ancient times: the Nabonassan Era, the Olympiads, the Years of the City of Rome, and the Era of the Seleucidae. It is true, the Julian Period is only a fictitious Era, a hypothetical, theoretical, or imaginary measuring line, invented by an individual and never put to practical use by a people, but it was invented for a purpose which it admirably serves, viz., to be a uniform and ideally consistent means of reckoning time from the biblical beginning of the world to the end of ages yet to come. "It was so called," says Dr. Jarvis (in his *Chronological Introduction to the History of the Church*, p. 98), "by its inventor, Joseph Justus Scaliger, because it supposes the Roman year, as reformed by Julius Caesar, to be extended back, so as to be a general measure of time from the beginning of the world. It consists of 7980 years,—the product of the lunar cycle of nineteen solar years, or 235 lunations, the solar cycle of twenty-eight solar years, and the indiction, a period of fifteen years, multiplied into each other."

With a view to convening in a common understanding of what is, and what is not, to be expected from the use of this ideal and exemplary Julian Period, let us consider briefly what is meant by the Roman year, the lunar cycle, the solar cycle, and the indictions.

The Roman year to which we refer in this connection is not the year of Romulus, or Numa Pompilius, or of the succeeding kings, nor that of the later republic: for in regard to that as well as to the former, we have not a single, solitary date which could be of possible interest to us, as having an indisputable reference and vital relation to the then-employed Jewish calendar, the character and constitution of which we ultimately desire to determine. The Roman year to which we refer is not even that form of the Julian calendar which was indeed submitted by the

great dictator and pontifex maximus himself, but is that scheme of the re-reformed Roman year as it was left by Augustus Caesar, who, as pontifex maximus, ordered the final correction of the Julian Calendar in the twentieth year of his Augustan dignity.

The Roman year, as left by Julius Caesar, differed from the form in which it was left by Augustus Caesar, in this somewhat minor respect that the name of one of the months, now known as "August" was then still called "Sextilis," and several months which now number thirty-one days had then only thirty days, while others which now have thirty had then twenty-nine [thirty-one] days to their name. But these facts will best be understood if we give a description of these reformatory transactions in the words of authoritative Roman authors, who wrote on the subject soon after the events themselves. Suetonius, the biographer of the Caesars, gives the following account of Julius Caesar's reformation of the calendar in J. P. 4668 or 46 B. C.: "He [that is, Julius Caesar] corrected the calendar, which had long been deranged, through the fault of the Pontiffs by unlawful intercalations, so that the holidays of harvest did not accord with the summer, nor those of the vintage with the autumn. He accommodated the year to the course of the sun, so that it should consist of 365 days, and that, the intercalary month being abolished, one day should be inserted every four years. That the computation of time from the new calends of January should in future be more exact, he interposed two other months between November and December; so that the year in which these arrangements were made, consisted of fifteen months, including the intercalary month, which, according to custom, had taken place that year." Accordingly, the year following that in which this reformation of the calendar had been executed, i.e. the year of Caesar's third consulship with Marcus Lepidus as his colleague [J. P. 4668 or 46 B. C.], looked like this:

January	(29+2=)	31 days.	Quintilis	(31+0=)	31 days.
February	(29+0=)	29 "	Sextilis	(28+2=)	30 "
March	(31+0=)	31 "	September	(29+1=)	30 "
April	(29+1=)	30 "	October	(31+0=)	31 "
May	(31+0=)	31 "	November	(29+1=)	30 "
June	(29+1=)	30 "	December	(29+2=)	31 "

The method by which the reformer arrived at this result is described by Macrobius (*Sat.* lib. I, CXIV) at length, though with an evident inconsistency in some of the particulars. He says: "Julius Caesar therefore added ten days to the old computation, to make up the year of 365 days in which the sun passes through the zodiac; and that the fourth part of a day might not be wanting, he decreed that every fourth year the priests who had charge of the months and days should intercalate one day.

the intercalation being made in the same month and place as among the ancients, that is before the last five days of February. He ordered this to be called *Bissextum*. The ten days, which, as we have said, were added by him, he distributed in this manner: in January, *Sextilis* (afterwards called August), and December, he inserted two days; and in April, June, September, and November, one. To February he made no addition, that the worship of the infernal gods might not be changed. March, May, *Quintilis* (July), and October, he preserved as they were, because they already had the full number of thirty-one days."

In partial contradiction to this account, the *Encyclopedia Britannica* (Art. *Calendar*), has this to say: "In the distribution of the days through the several months, Caesar adopted a simpler and more commodious arrangement than has since obtained. He ordered that the first, third, fifth, seventh, ninth, and eleventh months; that is, January, March, May, July, September, and November, should each have *thirty-one* days, and the other months *thirty*, excepting *February*, which in common years should have only *twenty-nine*, but every fourth year, *thirty* days. This order was interrupted to gratify the vanity of Augustus, by giving the month bearing his name as many days as July, which was named after the first Caesar. A day was accordingly taken from *February* and given to *August*; and in order that three months of thirty-one days might not come together, September and November were reduced to thirty days, and thirty-one given to October and December."

The truth of this assertion, and the manner of this capricious arrangement of days, is vouched for by the author already mentioned, Macrobius, who preserved the very resolution of the Senate and People of Rome, as it was passed in servile exaltation of the emperor, by which the month *Sextilis* was denominated *Augustus*, being augmented and distinguished by the addition of a day, although in immediate juxtaposition to the preceding month of days; and this by the spoliation of February, already the shortest month of the year. The *senatus-consultum*, recorded to have been passed by the legislature of Rome in the twentieth year of the Augustan Era, is worded thus: "Whereas the Emperor Augustus Caesar, in the month of *Sextilis*, was first admitted to the Consulate, and thrice entered the city in triumph; and in the same month the legions from the Janiculum placed themselves under his auspices; and in the same month Egypt was brought under the authority of the Roman people; and in the same month an end was put to the civil wars; and, whereas, for these reasons, the said month is, and has been most fortunate to this Empire, it is hereby decreed, by the Senate, that the said month shall be called *Augustus*."

This ringing declaration reveals the fact that, if any alteration was made by Julius Caesar in the number of days assigned to Sextilis or August, the change was not the addition of *two* days to the former twenty-nine, but the addition of only one day to a previous twenty-nine of August and another addition of one day to the previous twenty-eight days of February (instead of twenty-nine), or, in other words, if the month of February was diminished in the consulate of Censorinus and Gallus (the twentieth year of the Augustan Era) in order to augment the month of August, then the glorification of Augustus was accomplished at the expense of the infernal gods, and the month of February was not left intact and inviolate by Julius Caesar, as affirmed by Macrobius in his previous statement. So, whatever may have been the truth as to the assignment of days to the various months in the primary reformation of the calendar by Julius Caesar, it is not a matter of choice with us whether we prefer the form of calendar as left by Julius Caesar or Augustus Caesar, since it is our main aim and ultimate object to ascertain, if possible, the true historical date of the first Christian Easter, which, of course, fell subsequent to the death of Jesus under Pontius Pilate, at a time when the Augustan form of the calendar was religiously left unaltered and so remained unchanged until the days of the Gregorian reformation. If, then, in the pursuit of this predominant design, we are also led to ascertain the true dates of the nativity of Jesus Christ, the birth of Mary his mother, the dedication of Herod's temple and the capture of Jerusalem by Herod and Sosius,—all falling into this period of deranged calendar formation,—it is our province to set forth the dates for these events in the terms of a calendar understood and accepted by all, to wit, in terms of the Augustan formation rather than in the uncertain terms of the Julian form. At all events, it must be understood that it is the Augustan form of the Julianized Roman calendar that is incorporated in the constitution of the Julian Period, and it is the stereotyped form of the Augustan reformation that must and will be used whenever the Julian Period is appealed to. Being the form in which the Roman year is uniformly used, if used at all, by all scientists, scholars, and students, who have occasion to project their research work into the past, we shall employ the Julian period likewise as interpreted by the Augustan reformation in all our calculations and computation, even when an application of the deformed Julian calendar to dates within the scope of its duration would seem more logical and historical, because more true to life. As the United States government, in decreeing the birthday of its first great president to be an official holiday, established a precedent for the observance of February the twenty-second (new style) rather than

the eleventh of February (old style), the preference of the president for the old style date to the contrary notwithstanding, so the later Augustan style will be preferred to the Julian deformed throughout, though the latter, on account of its historicity, will not be ignored. As far as these transitional dates are concerned, we shall first compute them in the positively known form of the Roman year as embodied in the Julian Period, and then set forth these dates in their original, real, historical aspect with all its faults and failings. In this way we shall do justice to both, and arrive at results which shall place them beyond question or criticism.

The time when Augustus Caesar put the last finishing touch on the handiwork of his uncle, was the close of his twentieth year of dignity and supreme power under the name of Augustus. According to Censorinus, Octavianus Caesar was first saluted by the name of Augustus on the seventeenth day of January of the year of Rome 726 [or 725], when the emperor Augustus Caesar was consul the sixth time, and with him Marcus Agrippa the second time, 265 years before the day of Censorinus, who wrote his chronological masterpiece in 238 A. D. If, then, the years of Augustus began in $[265 - 238 =]$ 27 B. C., his twentieth year ended on January sixteenth, and his twenty-first began on the seventeenth of January, 7 B. C. It was at this juncture, shortly before the time when the intercalation of leap-year day was due, that the blundering over-insertion of bissextile days was discovered and corresponding corrections and changes in the calendar were officially decreed. But, while 7 B. C. was truly a bissextile year in the perverted order prevailing up to that time, it was not the thirty-sixth or the thirty-seventh year of the Julian calendar, as asserted by Prof. Totten and Dr. Jarvis, but the thirty-ninth, and the bissextile intended was not the twelfth, but the thirteenth mistaken intercalation. The first Julian year being J. P. 4669, or 45 B. C., the twelve actual blunders were committed in the triennial years 43, 40, 37, 34, 31, 28, 25, 22, 19, 16, 13, 10. The next, consequently, was due in 7 B. C. However, before this impending blunder could be reduced to a matter of fact (as blunder No. 13), the desire to honor the emperor by the renaming of a month and the augmentation of that month by the addition of a day to be taken from the intercalary month of February intervened and effectually prevented the false insertion. To right the wrongs of the last thirty-eight years, it was ordered by Augustus as supreme pontiff, that for the next twelve years there should be *no* leap-year at all, that is to say, no intercalations at all until the thirteenth year after 7 B. C. Since (if the normal order of intercalation had prevailed), the nine legitimate quadriennial bissextile years would have been 42, 38, 34,

30, 26, 22, 18, 14, and 10 B. C., and the tenth, eleventh, and twelfth, by anticipation, fell in 6 B. C., 2 B. C., and 3 A. D., it is obvious that the next legitimate quadriennial leap-year would (if not perversely dislodged from its rightful place) be 7 A. D., to be followed by 11, 15, 19, etcetera, etcetera. It follows, then, as a logical consequence, that the straight block of twelve years to be ruled out of the order of legitimate intercalation were 6, 5, 4, 3, 2, 1 B. C. and 1, 2, 3, 4, 5, 6 A. D. From this fact, too, it may be inferred that the leap-years of Julius Caesar, as originally intended and arranged by him, fell in harmony with the prolepses of the Egyptian years on the even years of the Julian Period, or, in the scale of the B. C. and A. D. years, on the even years B. C. and the odd years A. D. That such was historically the case, will be demonstrated in the course of our further proceedings.

Next to the component parts of the Roman year known as the twelve months, it is important to understand the inner arrangement and disposition of the fifty-two weeks and one day contained in each ordinary or common Julian year, combined with the quadriennial redistribution of days occasioned by the enlargement of its frame by leap-year intercalation. In other words, the origin of dominical or Sunday letters must be accounted for. In the first place, every common Julian year, having 365 days, i.e. $365 \div 7 = 52 + 1$, or one day over fifty-two multiples of seven, can and does begin in succession on every one of the seven days of the week in turn. In the second place, every fourth year or leap-year, having virtually two starting-points or a second additional new-year's day after its bissextile, in addition to its regular has the added peculiarity that each of its two beginnings falls on a different day of the week. Consequently, we require not only $3 \times 7 = 21$ letters to designate the twenty-one common years in a solar cycle, but seven double letters to mark the seven bissextiled years in such a cycle. Being thus created by the circumstance that each new-year's day coincides with a different day of the week, it is evident that every one of these twenty-eight years of a solar cycle must be so designated that the same numerals or letters cannot return or repeat the same order of seven letters until a revolution of this twenty-eight-year length has been completed. When so designated with letters and enumerated in order, the cycle will present a scheme like this:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
G	E	D	C	B	G	F	E	D	B	A	G	F	D	C	B	A	F	E	D	C	A	G	F	E	C	B	A
F			A			C					E				G				B				D				

In explanation, let us transcribe the definition of the solar cycle as given by Dr. Jarvis in his *Chronological Introduction*

(pp. 98–99): “As the common year consists of 365 days, or fifty-two weeks and one day, it follows that the letter A, opposite (in the Christian calendar) to the first of January, marks not only the beginning of each of the fifty-two weeks, but also the beginning of the fifty-third week, and therefore falls on the last of December. If the first of January be Sunday, the last of December is also Sunday, and the first of January of the second year is Monday. Consequently, Sunday [of the second year] will fall on the seventh day, marked G, and that will be the [Dominical or] Sunday letter. As the year commenced on Monday, it will end on Monday; and the third year will begin with Tuesday, opposite the letter A. Consequently, Sunday [in the third year] will fall on the sixth of January, and the Sunday [or Dominical] letter will be F. The fourth year will begin on Wednesday, opposite to the letter A; consequently, the [Dominical or] Sunday letter will be E, the fifth of January. But this being a bissextile year, the letter F which is opposite to the twenty-fourth of February, or the sixth before the calends of March, is repeated. The letter E being the Sunday letter, the twenty-third of February is Sunday; the twenty-fourth of February is Monday; the twenty-fifth, the second F, is Tuesday; the twenty-sixth, or G, is Wednesday; the twenty-seventh, or A, is Thursday; the twenty-eighth, or B, is Friday; the twenty-ninth, or C, is Saturday; and the first of March, opposite to the letter D, will be Sunday. Therefore D becomes the Sunday letter for the remainder of the year. Thus it will be seen that the letters proceed in retrograde order from year to year; that in common years there is only one Sunday letter, and in the intercalary years two; and that the last of these letters in the natural order serves first, and the first last. This interruption of the bissextiles is the cause why the same order of Dominical or Sunday letters cannot return till the end of twenty-eight years. These twenty-eight years are therefore called the solar cycle, because the Lord’s day is called *Dies Solis* or Sunday.”

Like fire under control, this “interruption of the bissextiles” is not now to be regarded as a disagreeable disturbing factor, but as a valuable chronological element introduced by Caesar to correct and regulate the keeping and recording of time. But for the invention of this safety device, the current of time would be left without valuable marks of distinction and orderly distribution. Hence the *Encyclopaedia Britannica* (art. *Calendar*) gives a very fitting description and tribute to the subject when it says: “The Julian Period, proposed by the celebrated Joseph Scaliger as an universal measure of chronology, is formed by taking the continued product of the three cycles of the sun, of the moon, and of the indictions, and is consequently $28 \times 19 \times 15 = 7890$ years. In the course of this long period no two years can be

expressed by the same numbers in all the three cycles. Hence, when the number of any proposed year in each of the cycles is known, its number in the Julian Period can be determined by the resolution of a very simple problem of the indeterminate analysis."

By way of explanation of the second component part to be reckoned with in the use of this purely ideal Julian Period, the so-called Metonic or nineteen-year lunar cycle, we will again take the liberty of transcribing a pertinent paragraph from Dr. Jarvis' *Chronological Introduction*, in which he says:

"The lunar cycle of Meton, called the golden number, is contained both in the calendar of Julius Caesar and in that of the ancient Church. The arrangement of the nineteen numbers is the same in both, with the difference, that in the calendar of Caesar, opposite to the first of January is the golden number I, whereas in that of the council of Nice it is the number III. To explain this, we must enter somewhat into the method of arrangement of the ancient computists in both calendars.

"The golden numbers, from I to XIX represent a series of years, containing 235 lunations, and intended to mark the new moons in each year, on the days in which they were supposed to fall. Sosigenes and probably other learned astronomers, employed by Caesar in this matter, finding that there would be a new moon eight days after the winter solstice, fixed on that day for the commencement of the new year, in order that the lunar and the solar year might commence together. Consequently the calends of January were marked with the golden number I, to show that it was the first in the series of the Metonic cycle [which, in this imminent year, began a new revolution of nineteen years]. The first lunar month, from the conjunction of the sun and moon on the first of January, consisted of thirty days. The second lunar month of twenty-nine days, began on the thirty-first of January, and ended on the twenty-eighth of February. The third lunar month, of thirty days, began on the first and ended on the thirtieth of March. The fourth lunar month, of twenty-nine days, began on the thirty-first of March, and ended on the twenty-eighth of April. The fifth lunar month, of thirty days, began on the twenty-ninth of April, and ended on the twenty-eighth of May. The sixth lunar month, of twenty-nine days, began on the twenty-ninth of May, and ended on the twenty-sixth of June. In like manner the remaining six lunations ended on the twentieth of December, thus falling short eleven days of the solar year. The thirteenth lunation, consisting of thirty days, would end on the nineteenth of the following January. On examining the golden numbers, the reader will find that number one is placed opposite to the first day of each of these

lunar months, and that on the twentieth of January commences the number two, to denote the first lunation in the second year of Meton's cycle commencing on that day. That lunation, being the fourteenth, consisted of twenty-nine days, and therefore would end on the seventeenth of February, and the second month of the second year would begin February eighteenth, consequently the number two is placed opposite to that day. Reckoning again thirty days, or eleven days in February and nineteen in March, we come to number *two* opposite to March twentieth, as the beginning of the third month in the second year. In this manner the twelfth lunation, which completes the second lunar of 354 days, begins December tenth and ends January eighth of the following solar year. On the ninth of January, the third lunar year begins, and consequently the golden number *three* is opposite to that day. In the same manner the whole nineteen years were reckoned;—and such was the arrangement of Caesar's calendar."

It will be seen from this very lucid exposition that, with such a nicety of demarkation and annotation of each and every year in this lunar cycle, it is virtually impossible to mistake one year for another or to get even two extremely similar years confounded with one another. It must be taken for granted, of course, that careful attention be paid to the particulars and minute details of the case when such are entered into in the description or definition of a date. If, indeed, this is not done, the finest tools and machinery are of no avail. Take, for instance, the years just mentioned. One of them, the second, is accounted one of the most important dates in history, and almost universally accepted as the year of Julius Caesar's untimely assassination. According to the computation of the council of Nice incorporated by Joseph Scaliger in the makeup of the Julian Period, the year J. P. 4670 [or 44 B. C.], if divided by nineteen, the factor derived from the lunar cycle, will yield 245 complete cycles with a remainder of fifteen, which indicates that J. P. 4670 is the fifteenth year of a Nicene lunar cycle, or, thirteen being subtracted from fifteen, the second year of a cycle, as enumerated in Julius Caesar's calendar. As exhibited so lucidly by Dr. Jarvis, the second year of this Caesarean registration initiated the fourteenth lunation of the newly reformed Roman calendar on the twentieth of January, paving the way for the ill-starred fifteenth lunation, in the course of which the crime (called the "Parricide" in the calendar) was committed. That lunation, beginning on the eighteenth of February and terminating on the nineteenth of March, ingloriously included the ill-fated "Ides of March," or the fifteenth day inst., by only five days, these being the last five days of the second lunation of the year. There can

have been no other (second or duplicate) "Ides of March,"—so the only fifteenth of March in the calendar of J. P. 4670 or 44 B. C. happened when the moon was already strongly on the wane in its last quarter. Yet the dictates of history and ancient tradition dramatically demand that the deed was done when the light of the full-orbed moon shone disturbingly in the face of Calpurnia, the wife of the great dictator, during the night preceding his assassination. So Plutarch says, in his *Life of Caesar*, that "he observed, *by moonshine*, Calpurnia in a deep sleep, uttering broken words and inarticulate groans." Since, then, a fast diminishing sickle in the sky is well-nigh incompatible with the mandate of a moonlight night, dissatisfied chronologists of note have turned either to the year *before*, i.e. J. P. 4669, or to the year 4672, two years later. Both variations are decidedly better fitted to be the date of the crime than the commonly accepted one, J. P. 4670. The earlier year J. P. 4669 (or 45 B. C.) has, at least, a full moon to offer on the fifteenth or Ides of March, since "the third lunar month, of thirty days, began on the first and ended on the thirtieth of March," while the later year J. P. 4672 (or 42 B. C.) offers both a full moon and a partial eclipse of the moon in the night of the thirteenth-fourteenth of March. However, which of the two alternatives is right, correctly determining the date of Caesar's slaying, is not for us to determine at the present time. Enough that we have seen how the chronological instrument called the Julian Period operates, exposing the errors of misconception and misinterpretation, and proposing instead the truth of historical description and true-to-life adjustment. We have learnt, not only that we can easily locate the lunations of any year since the creation of the world, but we may even approximate the calendric arrangement of the ancient lunar months, as they ranged and arrayed themselves in the days of Julius and Augustus and Tiberius Caesar, of Jesus Christ and of the evangelical writers, who reported the death and resurrection of the Son of Man. We may, if we feel we need the corroborating support of the moon's phasis for any month's beginning in the calendar of the day, obtain the same very readily by resorting to the use of the Julian Period.

This ideal period, then, so far as it presents a consistent, straightforward and all-comprehensive enumeration and seriation of years, will undeniably constitute the stamina and backbone of our chronological system; nevertheless we must insist, from the very outset, that a departure must be made from this approved and widely accepted standard of time-measurement for the duration of the epoch which it is our province to scrutinize, with a view to discovering the form of the Jewish calendar and incidentally stabilizing one of its pivotal dates in particular.

The need of this particular departure in the application and employment of the Julian Period has been recognized and pointed out by Dr. Jarvis, the author of that very valuable *Chronological Introduction to the History of the Church*, who, in the preface (p. IX) has this to say on the subject: "Any year of the Julian Period divided by nineteen, will give him the golden number, and opposite to that number the new moon of each month, and the number of lunations in the given years. The same may be done by Caesar's calendar, if it be examined by Caesar's cycle. His reformation of the calendar having taken place forty-five solid years before the common Christian aera, that number being added to any year of Christ, until the change of the Gregorian calendar, and dividing by nineteen, will give the golden number according to Caesar's arrangement. Opposite to that number is the day of the new moon. *A difference of from one to two days will invariably be found between that and the Nicene computation.*"

The third element from which the Julian Period was formed is the cycle of fifteen solar years, called the Indiction. It was first used or precedentially employed as a method of time-determination by Athanasius, the celebrated church father, who speaks [*de Synodis*, 25] of an assembly of ninety Arian bishops at Antioch, in the presence of the impious Constantius, *in the consulship of Marcellinus and Probinus, the fourteenth indiction.*" We may dispose of this third constituent part of the Julian Period in the words of Dr. Jarvis: "The word Indictio," says he (*Chron. Intr.* p. 99), "was originally used in the sense of tax, tribute, or assessment. At least it is so employed by Ammianus Marcellinus, and in the Theodosian code. Why it denoted also a term of years can only be conjectured; and when it was first so used authors are not agreed. In the *Chronicon Paschale*, under the title 'beginning of Indictions,' it is asserted that 'in the first year of Caius Julius Caesar—the consulship of Lepidus and Plancus—the indictions began to be used from the first of the month Gorpiaeus' (September). No example is or can be given of its use at that early period." And for this reason all further discussion of the subject may be omitted, since it is precisely to this "early period" that this present work pertains.

Having thus exhibited the principal elements of which the Julian Period is composed, we may refer briefly to the common measure of time connected with it, the vulgar era of reckoning B. C. and A. D. Speaking of the unfamiliarity and apparent haziness of this hypothetical, fictitious Julian Period when employed for the purpose of associating with it the practical epochs of Rome, the Olympiads, and of Nabonassar, Mr. Fynes Clinton remarks (*Fasti Hellenici*, Vol. III, pp. XII–XIV): "The Julian Period is insufficient for this purpose: for, although we assign

those three several eras respectively to the years of the Julian Period 3938, 3968, 3967, we are next to inquire the value of the Julian Period itself: an artificial period of 7980 years, obtained by multiplying $[28 \times 19 =]$ 532 by 15: and, till we have determined where this period begins and where it ends, it is wholly useless as a chronological measure for any practical purpose. It is necessary therefore to add, that these 7980 years will terminate in A. D. 3267, and that the 4714th year of this period coincided with the first year of the *Vulgar Christian Era*. *The years of our era, then, are the ultimate resort*; the form of computation into which all other numbers must be resolved at last, before we can ascertain or understand their meaning."

With an emphasis of such force we are naturally made to feel that we are bound, in duty to common sense as well as in deference to its great object, to adopt this "Vulgar Christian Era" as our commonest and best-adapted measuring rod of time, even though we are convinced that the epoch itself is based on an error of computation. It is made to begin in and with the year J. P. 4714, on the assumption that the Author of the Christian religion and the Denominator of the Christian Era was born just before the beginning of this year, i.e. on the eighth day before the Kalends of January J. P. 4714, or December twenty-fifth, J. P. 4713. According to Dionysius Exiguus, who evolved the theory, or, at least, first converted the ideal into a real working system by inaugurating his calendar cycle in J. P. 5244 or 531 A. D., the first year of his imaginary twenty-eight cycles (532 years before) was J. P. 4713 [or 1 B. C.]. But according to Bede, the Anglo-Saxon monk commonly called the Venerable Bede, the years of the Incarnation were counted from the first of January following, i.e. the January first of J. P. 4714 [or 1 A. D.]. As Dr. Jarvis (*Chron. Intr.*, p. 109), quoting Petavius, has it: "The incarnation and nativity of Christ were therefore, according to Dionysius, on the twenty-fifth of March, and the twenty-fifth of December preceding the first of January of that year, which Bede counted as the first of the Dionysian aera. The modern computation is that of Bede; but it is a curious fact, that the scheme of Dionysius was retained in practice, and that the common Christian aera always supposes the nativity to have been on the twenty-fifth of December in the preceding year, that is, in the year of the Julian Period 4713."

Now the assumption that Jesus Christ was born in J. P. 4713 (or 1 B. C.) is based on another presumption, to wit, that Jesus was born in J. P. 4713 or 1 B. C. because it is "about thirty years" before the consulate of the two Gemini, in which it was almost universally believed He was crucified, i.e. in J. P. 4742 or 29 A. D. This, of course, it is premature to determine, but it is

proper to call attention to the fact that, of all the data referring to the life of Christ, this particular description is the most indeterminate and vaguely defined of the whole lot. It is the only one that is qualified by an "about" or "as it were" or "so to speak"; yet it is on this foundation that the computation of Dionysius and many of the most honored church fathers is built, that Jesus was born in J. P. 4713 (or 1 B. C.). Be that, however, as it may, it is a fact that the Era is initiated in and with the year J. P. 4714, and, being so accredited, it is meet and right that a full description of it should be given. In the words of Dr. Jarvis:—

"The fact being now established that the first year of our Lord, according to Bede's corrected computation, was the second year of the first lunar cycle of Dionysius, though the eighteenth of that used in Alexandria; that it was the fourth of the indiction, whether reckoned from September or January; and the concurrents being five, that its Sunday letter was B, the tenth of the solar cycle: I proceed to show by what method Scaliger connected with it what he called the Julian Period.

"The object was, to determine which of the 7980 years of this fictitious period was to be considered as representing the first year of the aera thus brought into general use by Bede. Scaliger found that, by using the solar twenty-eight, the lunar cycle nineteen, and the indiction fifteen, as separate divisors, there was but one number which, so divided, would leave the several remainders, ten, two, and four. That number was 4714. Divided by twenty-eight, it would give 168 solar cycles, and ten as the remainder. Divided by nineteen, it would give 248 lunar cycles, and two as the remainder. Divided by fifteen, it would give 314 indictions, and four as the remainder."

Whoever of our readers and fellow-students has a desire to see this type of problem as it is worked out in full detail, may find it so evolved in the *Encyclopedia Britannica*, art. *Calendar*.

This astute determination of the initial year of the Christian Era in the body of the Julian Period we leave untouched and inviolate, as it was left by its author, Joseph Justus Scaliger. For, while we do not find that its apparent features were in harmonious keeping with the facts as they were, the Julian Period has today become so intimately and consistently connected with the chronology accepted by the world at large, that a change in the way of adjustment appears impossible. We cannot change the seriation of the Period so as to make it conform to the aspect of the year of the Christian Era without changing the registration of its years as it appears at the present time, nor can we substitute an inconsistent historical era for a consistent hypothetical period. We shall just have to recalculate each problem as it appears.

But, whether we make actual use of the astromical features of this very valuable period or not, the one invaluable feature of this scientific chronological norm is the mathematical or numerical order of its years. This is unchangeable and rigidly fixed forever. By means of its numbers, (not exclusively but principally) we wish to effect the unimpeachable regimentation of all the eras and epochs which enter by any relation whatever into contact or connection with the life and times of Jesus of Nazareth. By means of its numerical series we shall so locate and emplace the various differentiating and apparently conflicting periods of history that a decided orientation and positive regimentation of events shall be both an easy pastime and a profitable pleasure.

VOLUME I. CHAPTER II

THE NABONASSAN ERA

The second, or next best, measure of time, as a nucleus for the formation of a certifiable system of chronology, is the Egyptian Era of Nabonassar. The apparent contradiction in the name and title of this wholly historical era is explained by the fact that it refers to that period of Egyptian history during which that luckless land was subject to the domination of foreign rulers, beginning with those of Babylonia (whence the Babylonish nomenclature for an era entirely indigenous to the valley of the Nile), and ending with the imperial rulers of Rome, when the Era of the exotic conquerors and kings received its most impressive application. Had the Era been intended to include the native and naturalized Egyptian dynasties, as they are recorded by Man'etho, the Egyptian historian [fl. B. C. 263], the period thus obtained would have rivalled the fictitious Julian Period in duration, and, moreover, would have had this overshadowing advantage over the other, that it was a wholly matter-of-fact, true-to-life time measurement. As it is, it pertains only to the time of Egypt's submission to Babylonian, Persian, Macedonian, and Roman conquerors. Yet even as it is, it is of tremendous importance to chronology in general because of the solidarity, consistency, and cogency of its make-up. For it has not only a constitution of the same noble caliber throughout, a consistent seriation and enumeration of elemental parts, but it has a system of articulate members connected or rather identified with it which reinforces and corroborates it beyond compare. Its contents have been applied to the imagery of Scripture, and the make-up of the *Canon* attached to it has been compared with the makeup of the quadripartite image of Daniel's dream. But the four component parts of Ptolemy's *Canon* are not heterogeneous like the four poorly amalgamated quarter parts of Nebuchadnezzar's vision. They are mathematically and materially of one piece, cast in one mould and composed of one and the same substance. We cannot explain these facts and appraise their value in fitter terms or in fairer phrase than has been done by H. Grattan Guinness and James B. Lindsay, in an Appendix to the former's book *Light for the Last Days*, which we should like to transfer almost bodily to this work:

"The uncertainty which attaches to remote periods of secular chronology disappears at the date of the accession of Nabonassar, with whose reign the times of the four Gentile empires commence.

From this time forward we are able to verify the chronological records of the past; and the dates of ancient history are confirmed by astronomical observations.

"The astronomical records of the ancients, by whose means we are able to fix with certainty the chronology of the earlier centuries of the 'times of the Gentiles,' are contained in the *Syntaxis* or *Almagest* of Ptolemy.

"Ptolemy's great work, the *Almagest*, is a treatise on astronomy, setting forth the researches of ancient observers and mathematicians and reference to the position of the stars, the exact length of the year, and the elements of the orbit of the sun, moon, and planets. This work was written in Greek, and subsequently translated into Arabic, Persian, Hebrew, and Latin, etc.; It became the textbook of astronomic knowledge both in the East and in Europe, and retained that high position for about fourteen centuries, or till the time of Copernicus, the birth of modern astronomicals, three centuries ago.

"The chronological value of the *Almagest* is owing to the fact that it interweaves a series of ancient dates with a series of celestial positions. It contains a complete catalogue of the succession of Babylonian, Persian, Grecian, and Roman monarchs, from Nabonassar to Hadrian and Antoninus, together with the dates of their accession and the duration of their reigns. Its astronomic events are referred to definite historic dates, and by this connexion there is conferred on the latter the character of scientific certainty.

"This important feature of the *Almagest* is described as follows in the *Chrono-astrolabe*, by James B. Lindsay, a work published in 1858, demonstrating the authenticity of Hebrew, Greek, and Roman chronology, etc., by astronomic methods:

"The *Syntaxis* of Ptolemy contains an account of many historic events, and blended with them is a multitude of astronomical observations. The *astronomic* and *historic* cannot be separated, and they must both stand or fall together. The *astronomic* can be rigidly verified, and the truth of the *historic* is a legitimate deduction.

"In the *Almagest*, a celestial phenomenon is coupled with a terrestrial event. An eclipse of the moon or an acronic of Mars is assigned to a given year and day of a king's reign. The celestial mechanism, though complicate, is intelligible; the motions are calculable, and we can verify or falsify the recorded observations.

"With reference to Ptolemy's *Canon*, or chronological list of the monarchs of the four great empires, Lindsay says: 'The complete harmony that is to be found in this canon with the dates previously determined by eclipses, entitles it to our highest

confidence. That Ptolemy was its author, and not Theon, is confirmed by the fact that it is not continued beyond Antoninus, in whose reign our author dates most of his observations. We have had abundant evidence that he was φιλόπονος and φιλαλήθης a lover of labor and a lover of truth, and are fully warranted to regard this canon as giving to ancient history *mathematical exactness*....The motions and phases of the luminaries are visible every day, and with these alone we have been able to authenticate the whole of the *Almagest*. Even the errors of Ptolemy augment, if possible, the evidence for the authenticity of the *Syntaxis*; and a foundation is laid for chronology sure as the stars. The external evidence for the text-book is most abundant. It is mentioned in terms of the highest approbation by Greek, Hebrew, and Arabian historians. In the ninth century, the celebrated caliph, Al Mamun, caused it to be translated into Arabic. Persic and Hebrew versions engaged the attention of oriental savants in our middle ages, and at the dawn of printing Latin translations were abundantly diffused....It is to Ptolemy that our modern astronomy is almost wholly due; but those who enjoy the benefit have forgotten the benefactor. The name of Ptolemy, who was certainly not inferior, perhaps superior, to Newton, is seldom mentioned but to be covered with pity or with ridicule. Even men of science have not given to Ptolemy the honor that belongs to him. Delambre has fancied that he was a mere copyist of Hipparchus, and that to the latter the excellencies found in the *Syntaxis* are all to be attributed. Far be it from us to deny the greatness of Hipparchus, but Ptolemy was greater. *His account of the ancient eclipses, and of their connexion with historic facts, is more precious than gold, and guarantees a translation of the Almagest into every language.* In the want of modern instruments he may have made an error in the observation of the equinoxes, and all facts then known sanctioned [the theory of] the earth's stability. [But] *Veritas praevalerebit* [the truth will prevail], and the worth of Ptolemy is again appreciated.' "

In the face of such encomium, one would imagine that there could be no dissension or diversity of opinion on the chronological worth of the work of Claudius Ptolemaeus of Alexandria. One would think that that feature of it which pertains to history and statistics, at least, would be accepted by all the world without question. Yet, as has been hinted at in the same breath with his eulogy, this old-time sage and seer is oftentimes slighted and sneered at as if everything he taught were now antiquated and openly exposed as an obsolete fraud. One specimen of contemptuous criticism may suffice to express the unfavorable opinion of Ptolemy. Dr. Seyffarth, an exponent of a metachronistic system

of his own, takes exception to Ptolemy's system as follows: "Hitherto all men believed that the historical *Canon* of Ptolemy was infallible, because Babylonian observations of eclipses of the moon are connected with certain years in the reigns of his sovereigns. It is now known for certain, that Ptolemy fixed these eclipses only by means of calculations, and that, in almost every instance, he calculated wrong ones. And in this connection it has been demonstrated, that all our lunar tables, as was known already by the total eclipse of the sun in Germany, 1851, are constructed upon the false statements of Ptolemy; hence that they assume, as their basis, an incorrect mean motion of the moon and of the moon's nodes; as also a wrong coefficient of the secular equation, and that, therefore, they require to be rectified throughout. These corrections can be easily made by means of the total eclipses of the sun, found in the history of Rome, Greece, and other nations. The same is to be said of our planetary tables hitherto in use, which are also based upon the statements of Ptolemy. For in Egypt there have been found a vast number of the recorded observations of the position of planets, many of which extend back 3000 years earlier than Ptolemy's day, and serve for the correction of our planetary tables." (Dr. G. S.; *Summary*, p. 24.)

The question, accordingly, obtrudes itself. By what process of thought do different scientists arrive at such opposite opinions? Or, how does it happen that some very learned men can go into transports of delight over beauties of truth and excellencies of revelation, discovered or supposed to be discoverable in the *Era* and *Canon* employed by Ptolemy, while others utterly fail to perceive any virtue or real merit in them? The fact is, this difference of opinion is due to the difference in the standard of measurement applied to the work of Ptolemy. The catalogue of reigns and incidental events connected so intimately with the *Astronomical Canon* and through it bound up with the Nabonassan Era, is dated in agreement with one or the other of the dissenting systems of chronology which are at variance with the commonly accepted computation. Naturally, then, if dates of events and historical happenings are translated into periods of time in which they never happened, the result will be, either that the events reported will not fit into the surroundings and environments of those new periods, or the conditions and matters of fact of those periods will not conform to the events reported.

Now, the divers systems of chronology may be classed under two heads, those of *earlier* date and those of a *later* date, or, in other words, the systems asserting an *anterior occurrence* and the systems affirming a *posterior happening*. The former "previous" system, which antedates all of the Olympiads and prefers the

made-to-order computation of Varro unconditionally before all other reckonings of Roman years, is based in the main on the year of Julius Caesar's death, which Dr. Farmar Jarvis, Mr. Wm. Page, Prof. C. A. L. Totten, and others, not only call the "Gibraltar of Chronology," but make the very norm and pivot point of all ancient chronology. In consistent accord with this advancement of a year *ahead* of the commonly accepted date, all the happenings of ancient history are promoted a full twelve month, and all occurrences, including the eclipses calculated by Ptolemy, are dated prematurely a whole year. In this case, either all of the events alluded to in Ptolemy's *Canon* must be declared misdated, or a new interpretation of Ptolemy's *Canon* must be invented and applied. (We shall revert to this alternative later on.)

In the other case, the later occurrence systems of chronology, in which the death of the great Caesar is placed two entire years *later* than the commonly accepted date, all the Olympiads and eras of Rome are forcibly pushed down two full years, and, consequently, all the beginnings and endings of Ptolemy's canonical reigns are likewise pressed down and out of place. The result, again, is, that all the calculations of Ptolemy are declared erroneous and mistaken, because the conditions of the *later* years obviously do not correspond to the descriptions of the events. In this case, even a new interpretation of the *Canon* cannot save Ptolemy. He is declared totally and unmitigatedly wrong. This system of posterior happening of all ancient history was principally sponsored by Dr. Gustav Seyffarth, Caspari, and others.

It is plain from this brief survey that, with the ever-present Scylla and Charybdis on our right hand and on our left, to keep us in a constant turmoil of the spirit, it will be necessary to probe a few of the major points of chronology as, on the one hand, affirmed proven by the admirers, and, on the other, declared not proven by the detractors of the author of Ptolemy's *Canon*.

"In order to obtain a safe and scientific foundation for his mathematical calculations as to solar and lunar movements, including his valuable '*astronomic tables*,' " says Grattan Guinness (in the same place), "Ptolemy compares three carefully selected, well-attested ancient eclipses, observed at Babylon in the reign of Mardocempadus, with three other eclipses which he had observed at Alexandria in the seventeenth, eighteenth, nineteenth, and twentieth years of the reign of Hadrian. He similarly compares three eclipses which took place in the fourth century after Nabonassar, referred to by the celebrated Greek astronomer Hipparchus, with three other eclipses recorded by the same astronomer, which occurred two centuries later.

"In this comparison Ptolemy deals with no less than *four*

groups of ancient eclipses, Babylonian, Grecian, and Roman, containing three in each, twelve in all. These eclipses have been frequently verified by modern astronomers, and they combine to fix the chronological dates with which they are connected with the utmost certainty. If a single eclipse is sufficient to attest an ancient date, how conclusive the concurrent evidence afforded by four groups of eclipses! But these are not all the astronomic phenomena which Ptolemy records. We append a list of no less than eighty-five solar, lunar, and planetary positions, with their dates, as given in the *Almagest*, and as verified by modern astronomers. This list contains four vernal equinoxes, eight autumnal, four summer solstices, nineteen lunar eclipses, nine lunar observations, and forty-one planetary observations, including sixteen of Mercury, ten of Venus, five of Mars, five of Jupiter, and five of Saturn."

For the establishment and stabilizing of the Nabonassan Era itself, let us adduce just one argument, although, as Grattan Guinness observes, "the verification of the time of any of these events [referred to in the *Astronomical Canon*] is the verification of the *initial date from which the whole series is reckoned*." The argument produced by Ptolemy himself is given by Guinness in a foot-note: "In order to reduce these epochs to *noon of the first day of the Egyptian month Thoth of the first year of Nabonassar*, we have taken the *interval* of time which elapses from this day to the middle of second of the three first and nearest eclipses which happened, as we said, in the second year of Mardocempadus, between the eighteenth and nineteenth of the Egyptian month Thoth, at one-half and one-third of an equinoctial hour before midnight; which made an interval of twenty-seven Egyptian years (years of 365 days) seventeen days and eleven and one sixth hours very nearly; and casting out two complete revolutions in longitude, $123^{\circ} 22'$ and $103^{\circ} 35'$, if we subtract respectively these quantities from the positions of the middle of the second eclipse, we shall have for the first year of Nabonassar, the first day of the Egyptian month Thoth, at noon, the mean place of the moon $11^{\circ} 22'$ of Taurus in longitude, and $263^{\circ} 49'$ anomaly, from the apogee of the epicycle, that is to say, at $70^{\circ} 37'$ elongation; the sun, as has been proved, being then in $0^{\circ} 45'$ of Pisces." (*Almagest*, chap. vii). And Guinness concludes: "Thoth first Nab. 1 is thus abundantly determined to be noon Feb. 26th, J. P. 3967 or 747 B. C."

However, being not so much concerned with the verification of the Nabonassan Era as such as with the vindication of the *Astronomical Canon* of Ptolemy, so closely connected with that ancient era, we shall compare the date of a few of the principal events with the years of the Julian Period, on which we have

decided to graft and inoculate all the eras and epochs which in any way, shape or form have anything to do with the life-time of Jesus, as on an authoritative and well authenticated standard of chronology.

We choose, as the first of these, the eclipse of the moon recorded by Ptolemy as having occurred in the fifth year of Nabopolassar. We do not know the circumstances which caused the historian and the astronomer to bring this particular eclipse of the twenty-seventh of Athyr into connection with this particular year of Nabopolassar, but, whatever the occasion, it happened on the twenty-seventh of Athyr, the eighty-seventh day of the 127th year of the Nabonassan Era. Since the New Year's day of the Egyptian year fell in J. P. 4093 to 4096 (or in 621 to 618 B. C.) on Jan. twenty-fifth (excepting in the leap year), this lunar eclipse happened on the eighty-seventh day thereafter, or, in Julian terms, on the $[24+87=]$ 111th day of J. P. 4093, and this was April twenty-first, 621 B. C. Now, if this Ptolemaean eclipse was a natural, and not an abnormal, obscuration of the satellite, it happened when the moon was at the full, or, in other words, was fourteen to fifteen days old. Its neomenia, therefore, must have fallen on April eighth or the ninety-seventh day of the year. If, then, according to the view of the earlier-occurrence chronologists, the events ordinarily ascribed to 621 B. C. or J. P. 4093, and, among them the eclipse assigned by Ptolemy to Nab. 127, actually took place in J. P. 4092 or 622 B. C., then the eighty-seventh day of Nab. 126 must coincide with the full of the moon, and the fourteenth day before it—the seventy-third of the year—must produce a neomenia, or the new date assumed by these chronologists is a mistaken one. [To put this matter to a test, divide 4092 by 19. $4092 \div 19 = 215 + 7$. You will find that the seventh year of the lunar cycle prevailed, when the exact or age of the moon on January first was twenty-one days. The neomenias of 622 B. C., therefore, were due on December tenth, November tenth, October eleventh, September twelfth, August thirteenth, July fifteenth, June sixteenth, May eighteenth, April eighteenth, March twentieth, February nineteenth, and January twentieth. The Ptolemaean eclipse of Athyr 27th, then, must have fallen fourteen to fifteen days after the twentieth of March or the eighteenth of April. But the twentieth of March, i.e. $79+14$, would have caused a lunar eclipse to occur on the $[79+14=]$ 93rd day of the year, i.e. on April third, while the eighteenth of April would have created one on the $[108+14=]$ 122nd day, i.e. on May second, the twenty-seventh of Athyr, in the meantime, hanging fire on the 111 $[-112]$ th day of the year. How, then we may ask, can a conjunction have taken place in this year when historical dates and calendric conditions

are so discordant? It is evident that, whatever other year may have witnessed an obscuration of the moon on Athyr twenty-seventh, it was not the year preceding the one assigned by the astronomer. But there is still another consideration which forbids the selection of J. P. 4092 or 622 B. C. as the true year of the Ptolemaean eclipse.

If we may be permitted to compare the list of eclipses which have occurred within the cognizance of our present oldest generation and the preceding one, with the list of lunar obscurations calculated by Ptolemy, we shall find that the same series of eclipses recurred in the years 1848 to 1948 A. D. As in 721 B. C. the most remarkable eclipse of the moon occurred on March nineteenth, with two others following in the next year, 720 B. C., on March eighth and September first; so, in 1848 A. D., the most complete eclipse of the moon occurred on March nineteenth, with two others to follow, in 1849, on March eighth and September second. And, as the deeper law of planetary motion will permit no eclipse, partial or total, to occur in 1947 A. D. (save only two obscurations of the sun), so the same profounder law governing the movement of the heavenly bodies permitted no overshadowing of the moon, however partial or total, in J. P. 4092 or 622 B. C. Since, then, the laws of planetary motion will not admit the possibility of a lunar eclipse having happened in the year preceding the commonly accepted date for the fifth year of Nabopolassar, it is evident that neither the celestial nor the terrestrial events of that year can be fairly transferred from the actual to the earlier year. It follows, therefore, that, so far as the anterior theory, at least, is concerned, Ptolemy's computation and chronological location of Nabopolassar's fifth year is right, and will stand in contravention to it as long as the laws of the universe endure.

The same argument from the disordance between calendric and historic conditions will apply equally as well to the claims of the later-occurrence school of chronology. According to the advocates of the later view the events attributed to 621 B. C. should be assigned to 619 B. C. or J. P. 4095. But the age of the moon at the beginning of 619 B. C. was thirteen, consequently the new moons of the year were due on January sixteenth, February fifteenth, March seventeenth, April sixteenth, etcetera, etcetera. The full moons in the wake of March seventeenth and April sixteenth respectively would be on April first and thirtieth, being respectively the ninety-first and the 120th days of the year, while the twenty-first of April, with which alone the twenty-seventh of Athyr can unite as the day of Ptolemy's eclipse, is the 111th. Needless, then, to say that, under the circumstances, it is impossible to expect a conjunction of the planets, such as is

necessary to produce an eclipse, on the twenty-first to twenty-second of April in 619 B. C.

If, then, the obscuration of the moon, as recalculated by Ptolemy, is at all historical, and not purely hypothetical, then the year J. P. 4093 or 621 B. C. is indeed the fifth year of the year of Nabopolassar. It may be the fifth year of this ancient Babylonian monarch in a strictly matter-of-fact sense, according to which he actually ruled high-handedly over Egypt during the whole or major part of Nab. 127, or it may be the truly fifth year of his reign in a canonical, hieratic sense, according to which, true to the technical principles of the *Canon*, the entire bulk of the year Nab. 127 is ascribed proleptically to Nabopolassar, although he may have ruled over Egypt, as in his fifth year, only during the last few days of 621, or even only on the last of the twenty-four days in the January of 620 B. C., which still belonged to the Egyptian year Nab. 127. In this extreme case of canonical adjudication, such as occurred later on in the case of Caesar Augustus in 29 B. C., and in that of Antoninus Pius in 138 A. D., the historical lunar eclipse in connection with which the event took place which caused the celestial phenomenon to be recorded, may have happened on April eleventh to twelfth, 920 B. C. This was a total darkening of the moon, and naturally much more remarkable than the partial obscuration commemorated by Ptolemy. In this case, if the regnal years of the king commenced about the fifteenth of April, it is conceivable that both eclipses of the moon, the partial and the total, belonged to one and the same regnal year, and both might serve to rivet the fifth year of Nabopolassar to April fifteenth, 621, to April fourteenth, 620 B. C. In this case, Ptolemy would still be right, and the most painfully meticulous statistician would still be appeased and satisfied that Ptolemy's *Canon* is right when it places the lunar eclipse of Nab. 127 in the fifth year of Nabopolassar.

But it may be inferred; nay, it must be inferred from the technical, and constructive principles of the *Astronomical Canon*, as clearly demonstrated in the regnal years of Antoninus Pius, 138, 139 and 150 A. D., that, in composing his *Canon* and in computing his problems by means of it, Ptolemy designed and intended to use the series of the Egyptian years as whole and integral items rather than the fractional, broken-up, and ever varying succession of the actual regnal years. He clearly intended to give whole integers only to each representative of Power over Egypt, as he also clearly omitted rulers from his list, whose reign, amounting to less than a year, failed to include that pivotal point in the vague Egyptian year on which hung the assignment of each year. Accordingly, the Alexandrian philosopher plainly purposed and proceeded to avail himself of the fact that, in the

fifth year of Nabopolassar, taken as a whole, there was a remarkable eclipse of the moon, related as having occurred on the twenty-seventh day of Athyr, Nab. 127. On this fact he based his calculations, and on this fact published the result of his investigations. These results have been re-examined and verified by modern scientists. Petavius says it occurred 7 h. 15 P. M., April 21, 621 B. C. Ideler computes that it occurred at 17.50 from noon, April 22, 621 B. C., Lindsay at 17, 3 dig. S. At all events, it is proven by Ptolemy that the fifth year of Nabopolassar is indeed the 127th year of the *Canon*, and this is identified with the 4093rd year of the Julian Period, or 621 B. C., as required by the figures which serve as factors in its composition. This being so, this verified date certainly helps to determine the correct position of the first section of Ptolemy's *Canon* relating to the twenty kings of the Assyrians and Medes, in that it bridges over the worst and most disputed period of Chaldean history. And landing us in the regions of more fully attested and better authenticated chronology, we may proceed with greater assurance to a brief survey of the second and third sections of Ptolemy's *Canon*.

The second section of the *Astronomical Canon* relating to the ten Persian kings and the Macedonian conqueror, who successively held sway over the homeland of Ptolemy, comprises a period of 215 years. The first having ended with Nab. 209 on January fourteenth, J. P. 4176 or 538 B. C., the second extended from the following day, Thoth first, Nab. 210, to the close of Nab. 424, when the last day assigned by Ptolemy's *Canon* to Alexander the Great fell on November eleventh, J. P. 4390 or B. C. 324. No matter how we compute this termination of the second section,—by the years of the Philippic Era, 562 Egyptian years from the date of Censorinus in 238 A. D., Nab. 986—562 = 424; or by the years of the Augustan Egyptian Era, Nab. 986—267 = 719, combined with a year of transition, 719—1 = 718, and the regnal years of the Greek kings in Egypt, Nab. 718—294 = 424, the near end of the period of Persian domination in Egypt is always fixed to the last day of Nab. 424, which synchronized and harmonized with the eleventh day of November, J. P. 4390 or 324 B. C. This being the case, the duration of the second section of Ptolemy's *Canon* could be computed in days ($215 \times 365 = 78475$) instead of (215) years, and every historical event, if dated in terms of the Coptic or common Egyptian Calendar, could be calculated by a simple process of arithmetic. As it is, this is feasible only in a few instances, such as the lunar eclipses and other astronomical phenomena computed by Ptolemy. However, the Persian division of his *Canon* is otherwise well fortified and reinforced with remarkably strong chronological proofs. This

period of 215 years contains so many elements of incontestable chronological merit that the full tale of them will hardly be required to inspire confidence in the solidarity of Ptolemy's *Canon*. Yet, because this very period contains the basic dates on which the dissenting schools of chronology found their conclusions, it will be necessary to study a few of them in the next chapter. This perusal will be all the more interesting and instructive because it is from this section that we derive our first information about the Olympiads, the Metonic Cycle, the Calippic Period, and the general structural frame of the Jewish or Syro-Macedonian Calendar.

Of the nineteen lunar eclipse-computations by Ptolemy, no less than six of them are devoted to this section. They are emplaced in the seventh year of Cambyses, the twentieth and thirty-first years of Darius I, or Hystaspis, the one-year term of Phanostratus, an archon of the city of Athens, and the next year term of Evander, another prime minister or Lord Chamberlain of Athens. The object of Ptolemy, in appealing to this section of the Nabonassan Era so extensively, was not to bolster up this part of history with astronomy, but contrariwise to support his theory or system of astronomy with the evidence and proof of history. Look at this imposing block of chronology from what angle we may, we are amazed at the copious and unquestionable amount of chronological material piled up like an impregnable wall from the beginning to the end. From the first year of Cyrus in Nab. 210, which was equivalent to J. P. 4176 or 538 B. C., to the last year of Alexander the Great in Nab. 424, which corresponded to J. P. 4390 or 324 B. C., this section is a solid piece of masonry. Not only are the several reigns of the Persian kings unequivocally defined in plain figures and phrases, but nearly the whole period is blocked off with the greatest degree of regularity by the quadriennial series of Olympiads, and these Olympiadic years, in turn, are arrayed in an unbroken line of yearly appointed archons from the invasion of Greece by Xerxes to the death of Alexander the Great, leaving only the reigns of Cyrus with its nine years, of Cambyses with its eight years, and that of Darius I with its thirty-six years, to be seconded less consecutively by Greek chronology. It behooves us, then, to examine this interval of fifty-three years as to its proper authentication in history, in the correct emplacement of the Persian reigns in Egypt, and the accurate computation of the eclipses brought into connection with recorded dates.

Since, at the present stage of our inquiry, we are not supposed to appeal to scales and standards of time-measurement not yet substantiated, we are not at liberty to cite the records of the Olympiads or the roster of Athenian archons in proof of the data

contained in Ptolemy's *Astronomical Canon*. What we can do with Olympiadic and archoniate evidence at the present time is to treat it as ancillary toward approximating the time of a given matter-of-fact. Thus the invasion of Greece by Xerxes in the fifth year of his reign is said to have occurred just as the people of Greece were celebrating the seventy-fifth contest of the Olympic games, in the summer of that year in which the Athenian archon Themistocles retired from office, and Calliades, his successor, entered upon his term; that an eclipse of the moon took place on the third day of Tybi, Nab. 257, in the thirty-first year of Darius I, or, as Dionysius (*Ant.* VII, p. 1310-13) says, in the second year of the seventy-second Olympiad; and that another lunar eclipse occurred on Phamenoth seventeenth, Nab. 225, or, as Eusebius implies, in the third year of the 251st Olympiad year, consequently in the second year of the sixty-fourth Olympiad. Hence it is clear that the earlier obscuration was either in J. P. 4191 or 523 B. C., according to anachronistic chronology, or in J. P. 4192 or 522 B. C., according to the commonly accepted reckoning; that the later obscuration was either in J. P. 4223 or 491 B. C., according to the earlier occurrence theory, or in J. P. 4224 or 490 B. C., according to the view most generally accepted, and that, consequently, the irruption of Xerxes into Greece was either in J. P. 4233 or 481 B. C., according to the reckoning of the "earlier" school, or in J. P. 4234 or 480 B. C., according to the computation of the great majority. It is needless to drag the metachronistic view continually into consideration, as that is entirely too far out of the picture, and, besides, is automatically disposed of by our argument.

At the first cursory observation it might appear as if the *Astronomical Canon* of Ptolemy fell in harmony with the theory of Dr. Jarvis, Mr. Page, and Prof. Totten in a veritably offhand manner; for the earlier-occurrence chronologists agree apparently with Ptolemy in synchronizing the expedition of Xerxes with Nab. 267, the battle of Marathon with the eclipse of Nab. 257, and the seventh year of Cambyses, including its eclipse, with the Egyptian year Nab. 225. But, if the patient searcher after truth will compare the ancient years 523 to 480 B. C., with the modern years A. D. 1851 to 1894,—the ancient 523 and 522 with the modern 1851 and 1852, 491 and 490 with 1883 and 1884, and, finally, the years 481 and 480 with the years 1893 and 1894,—he will perceive that, allowing for a difference of three days, the same series of eclipses is repeated team for team. The first team to emerge from this comparison would be a partial eclipse of the moon on July sixteenth, 523 B. C., and a total eclipse of the moon on July fifth, 522 B. C.; the second would be a partial eclipse of the moon on the twenty-fifth of April, 491 B. C. and a

total eclipse on the twelfth to thirteenth of April, 490 B. C.; and the third, two total eclipses of the sun on April nineteenth and October thirteenth, in 481 B. C. and two total eclipses of the sun on April eighth and October third (second) in 480 B. C. The significance of this comparison now is that, in every case, there is an eclipse more suitable and adapted to the circumstances of history as adjusted by the commonly accepted system of chronology than there is in the new arrangement by the earlier occurrence school. Not to appeal to the testimony of the Olympic mode of reckoning, which favors the common chronology in all these cases, the characteristic features of the later year phenomena cast their weight of evidence in favor of the commonly accepted dates. Not only were the lunar eclipses of 522 and 490 B. C. more remarkable and conspicuous for their extent and density, but the solar eclipses of 480 B. C. or J. P. 4234 comply with the requirements and conditions of history more manifestly than do those of the preceding years. For, in this last case, for instance, Herodotus relates expressly (B. VII, c. 37) that it was at the commencement, not at the end or the middle of spring that the Persian army broke camp at Sardis, when, "at the moment of their departure, the sun, which before gave his full light, in a bright unclouded atmosphere, withdrew his beams, and the darkest night succeeded." But, according to the *Praenestine Calendar*, which naturally conveys a better impression of calendric and climatic conditions in ancient times than anything else we possess, the date of the beginning of spring was as early as the ninth of February, while the middle of spring was fixed at April twenty-fifth. Without wishing to stress the unusually early commencement of the vernal season, the fact may be fairly emphasized that the earlier occurrence of the eclipse in 480 B. C. conforms to the description of the historian much more closely and consistently than that of 481. The same may be true of the lunar eclipses of 522 and 490 B. C.

But the question is now very properly raised with an urgent demand for an answer. If the commonly received chronology is correct, does this not invalidate the chronological claims of the *Astronomical Canon*? Is not the astronomer Ptolemy proven by the historian to have been in error? No, not at all. In the first place, Ptolemy, as an astronomer, was not outlining a scheme of history, but basing a system of astronomy on the dictates of history. That is to say, he does not attempt to give the exact duration or the precise time-determination of his monarchs' rule, in years, months, and days, but only in years, exclusively of fractions, as they were rounded out in vague Egyptian twelve months. As, in the case of Alexander, not a month, nor a week, nor even a day, of Nab. 425, the Egyptian year in which he died,

was accredited to him as a legitimate part and parcel of his reign, though he lived and reigned till the month of June, J. P. 4391 or 323 B. C., so in many other cases the fractions of regnal years which extended beyond the final or closing days of the vague Egyptian years, are deliberately or automatically ignored by the author of the *Astronomical Canon*. The same thing is true of the reigns of Cyrus, Cambyses, Darius I, etcetera, etcetera.

In the second place, when we compare the eclipses collated with each other by Ptolemy, i.e. "the first eclipse observed at Babylon, in the thirty-first year of Darius I, in the Egyptian month Tybi, third to fourth day, in the middle of the sixth hour [on the twenty-fifth of April, 491 B. C.], in which it is declared that the moon was eclipsed two digits on the south," with "another observed in the eighth year of Adrian," at Alexandria, on the seventeenth of Pachon [or the fifth of April], at 8:50 P. M., according to Pingre, or at 8:24 according to Lindsay (which, according to the same authority, was also eclipsed 2 dig. on the S., it does not appear credible that the brilliant astronomer of Alexandria should have been unconscious or ignorant of what he was doing; that he unwittingly compared a partial obscuration with another partial obscuration of the same size, when he should have collated a total eclipse with another total or partial obscuration. It does not appear possible that a man so befuddled in his mind should have computed any eclipse or celestial phenomenon whatsoever, let alone have invented a norm of time-reckoning so logical and scientific as the *Astronomical Canon*.

But granting even so wild a supposition that the ancient philosopher was confused in his mind and bewildered for the time being, it cannot be admitted that the *Canon* itself is confused or awry in any particular. This illustrious product of an illustrious, almost divinely illuminated mind, is consistent and rigidly correct throughout its entire structure. It always touches the point of historical happening, and regularly contacts with pivotal events, even though the instant of contact be but for a single day. The Ptolemaic years, because Nabonassan or native Egyptian years, seldom, and then never for more than three years, correspond absolutely to a day with the regnal years of his sovereigns (as in the first two years of Tiberius Caesar), but they go on and proceed through the ages with the most perfect symmetry and regularity. They may appear to violate the natural state of affairs, as in the case of the Philippean Era (or the Era of Alexander), which begins hieratically with the first of Thoth, Nab. 425, more than half a year in advance of Alexander's demise, but the point of contact is in its proper place. What, then, is the key, the open sesame, to the *Canon* of Ptolemy? what the technical principle on which the norm has been constructed? In other

words, what rule or regulation invariably discloses and solves the mystery of Ptolemy's *Canon*?

It has been observed before that there seemed to be a constant agreement between the demarkations of the *Astronomical Canon* and the time-determinations of the anachronistic school of chronology. This apparent harmony is due to a mistaken interpretation of its principles. What this mistake consists in, and how it operates to produce this false effect, will be best understood if we reproduce the misleading explanation of it in Prof. Totten's own words, as he presents it in *Our Race Series* IV., No. 16, pp. 350-354:

"Ptolemy's *Canon* has given chronologists no end of trouble, because they have without exception failed to understand its real object, and the fundamental principle of its construction. Petavius correctly edited the Canon, but considered Ptolemy to have lost a year out of the reigns of the Roman emperors after Caligula. Dodwell brought the application closely to the old system, but not to the facts. Des Vignolles laid down certain rules, but failed to solve the secret, and Faussett followed with three other rules, every one of which is wrong. The fact is the *Canon* has never been understood *because it could not be made to fit a false system of Chronology*.

"Ptolemy's priceless *Canon* consists of a list of the consecutive Chaldean, Persian, Greek, and Roman rulers [over Egypt] from Nabonassar to Antoninus Pius inclusive, together with certain numbers attached to their names which have been regarded as indicative of the lengths of their respective reigns in Nabonassan years. These numbers, according to various codes of complex interpretation, have been employed to fix the origins and durations of the several reigns, *whereas they should have been employed simply to check the result obtained* (as Ptolemy did his result) *by independent methods*.

"Imagine a section of the thread of Time consisting of 331,055 days to be knotted at every 365th day, and call the knots *Thoths*. They mark the positions of Thoth first on the Nabonassan Scale of vague years covered by Ptolemy's *Canon*, which consists of 907 such vague years. Call the first knot one, and nail it [i.e. not the first knot, but the front end of the thread] to the Harmonized Scale of Time at Thoth first, 1 Nab., i.e., to Wednesday, February twenty-sixth, 747 B. C., O. S. Now come down the scale of time, keeping the thread taut and counting Thoths, as it slips through the hand, assigning to each reign the exact number only as given to it in Ptolemy's *Canon*. Knot one of each subordinate regnal group will be the first Thoth [? year?] that occurred in such reign. This location of the first Thoth is without reference to the exact date of accession, and always falls on it or subsequently thereto....

"We will now illustrate it specifically by taking a particular reign, and applying the principle thereto; for instance, that of Titus, the end of which we have now reached, and which lends itself to our purpose very noticeably.

"Titus came to the Empire as sole Emperor on June twenty-third, 78 A. D. This was forty-one days before August fourth, which was Thoth first, 826 Nab., and thus the first Thoth scored off for him by Ptolemy. August fourth, 79 A. D. (Thoth first, 827 Nab.) was the second scored off, and August third, 80 A. D. (Thoth first, 828 Nab.) the third and last; three in all, and no more; because he died forty-one days thereafter, or on September thirteenth, 80 A. D., which was Paophi twelfth, or the forty-second day of that particular Nabonassan year (828)."

Now, the effect of this novel interpretation of Ptolemy's *Canon* is not only this (in which we are particularly interested), that the dates of *all* the precedent Caesars are fixed "one year earlier than the textbooks allow," but that all of the dates of ancient history, at least as far back as the *Astronomic Canon* extends, are moved up an entire twelve-month or 365 days. Hence the seeming easy correspondence between the chronology of this school and the *Canon* as interpreted above. But let us see how this style of interpretation will stand the test of closer scrutiny.

In the first place, it will be noticed that the professor failed to state his case correctly. To get it right he should have said: Let the thread of Time begin with a knot on the first day of the first year of the Nabonassan Era, and then, for 906 consecutive times, be knotted on every 365th day thereafter. In this way, the first day of each of the 907 years will be marked by a knot, and each knot, so enumerated and numbered, will be designated as the one point of contact between the canonical and the actual series of reigns which must necessarily exist in order to constitute a real, true, and matter-of-fact computation. If, on the other hand, Prof. Totten had meant (what he did not intend to say, to wit, that the section of time constituting the *Astronomical Canon* "be knotted at every 365th day" from the very beginning, the days so designated and enumerated would not be the New-Year days of the Nabonassan Era (the Thothes), but the last days, the last of the five epagomenae, the last of each annual eschatological count. They would then, too, be the days on which depend all the regnal years of all the monarchs mentioned in the *Astronomical Canon*. They would, finally, be the solution of Ptolemy's *Canon*. The *last days*, not the *first*. The days of finished toll as well as of finished toil, the days of another span of life fulfilled, the days of consummation rather than of things undone. The *last days* are the days of reckoning. And as the last day of every

year is logically and typically a day of reckoning, so the "last days," the final, closing days of the 907 years of his *Canon*, were to Ptolemy, not only the essential items of interest in the history of canonical sovereigns, but the absolutely necessary integers required to make his count complete and perfect, and so insure a mathematically correct computation of time. In short, the solution or key, the open sesame, to the *Canon* of Ptolemy, is not the day of commencement, the day of small beginnings, but the day of accomplishment, the day of the finished product, the day of consummation.

In the second place, let us briefly inquire, Even if the explanation of the solution of Ptolemy's *Canon* was not itself a success, is the application of the alleged solution more successful? Does this new-fangled interpretation of the *Canon* permit such a shifting of history as appears called for at first sight? A look at the diagram on p. 369 of the same serial, visualizing the order of Domitian's regnal years in relation to the Canon, will immediately convince you that, in this case at least, the new solution absolutely fails to make good. There, on the right-hand side, is a note which, referring to Nab. 840 from July thirty-first, 92 A. D., to July thirtieth, 93 A. D., declares: "This date positively fixed as 840 Nab. *Canonical* twelfth of Domitian, by Ptolemy in the *Almagest*." The question now is: How about the *historical* twelfth year of Domitian? Is that fixed or in anyway affected by the occultation of Pleiades on November twenty-ninth, 92 A. D., by virtue of the fact that it is canonically ascribed to the "twelfth year of Domitian"? According to the preferred chronology of Prof. Totten, the historical twelfth year of Domitian extended from September thirteenth, 91 A. D., to September twelfth, 92 A. D., leaving the astronomer's observation stranded high and dry, fully seventy-eight days on the outside of his own limitation. Can this be called an endorsement of Ptolemy's *Canon* by history, or a verification of history by Ptolemy's *Canon*?

To impress on our minds the immense importance of acquiring a correct understanding of the *Astronomical Canon*, let us contemplate as a warning example a specimen of misinterpretation as imposed on this noble work of Ptolemy, in regard to that section of the world's history which is the pre-eminent point of interest in the present inquiry. Like Hales, who, before him, pronounced the dictum that "the Thoth of the first year is to be assumed to be the true commencement of a reign," regardless of the fact, (admitted by all, and explained by Hales himself), "that the Thoth, or the first day of each reign in the *Canon*, was a [mere] technical date; always preceding the true commencement, and often preceding it by many months" (see Clinton, *Fasti Hellenici*, Vol. II, p. 368n), G. H. French, in his book en-

titled *The Birth and Boyhood of Jesus Christ*, commits himself thus: "Now the Eastern method of reckoning the regnal years of the early emperors (which is the point immediately in discussion) was to date them, *not* as in the West *from the day of accession, but from the New Year's day* [the first of Thoth]. This, with the Greeks of Syria, was, as stated above, September first: with them, therefore, the first year of an emperor's reign *ended* with August thirty-first following his accession to the throne; and his *second* year *began* on September first, *no matter if there had intervened 364 days or only one day since his accession*. The method followed by the other Easterns above-named was the same—the New Year's day alone differing. In this, however strange to Western minds, the Easterns were but *following the ancient method used in Ptolemy's Canon*, and used from time immemorial in Babylon (probably) and in Egypt (certainly), where Thoth one, the New Year's day, was the day from which every regnal year of the kings was reckoned; whether Thoth one were moveable (as in the ancient "vague" year and on Ptolemy's *Canon*), or fixed to August twenty-ninth [thirtieth] (as it became in Egypt from 25 [27] B. C.: and always, which is the important point, *the first year of a reign ended on the day preceding the first New Year's day that followed the accession*."

"As Tiberius came to the throne on August nineteenth [twentieth] of A. D. 14, his *second* year began, according to the mode of reckoning we are describing, on September first of A. D. 14 [? !] and ended on August thirty-first of A. D. 15: and his *fifteenth* year, in which, according to Luke, our Lord was baptized, *began on September first of A. D. 27 and ended on August thirty-first of A. D. 28* [!]: whereas, according to the Western and official mode of reckoning, his second year began on August nineteenth [twentieth] of A. D. 15, and ended on August eighteenth of A. D. 16; and his fifteenth year in which according to the official archives our Lord was crucified, began on August nineteenth [twentieth] of A. D. 28 and ended on August eighteenth [nineteenth] of A. D. 29. Thus the Eastern reckoning of Tiberius' years antedated the official and Western reckoning of 352 days."

This amazing bit of specious pleading permits us to put on exhibition one of the finest points of the Ptolemaic system of computation. Without entering into the question of the historian's say-so in the matter of the decease of Augustus and the accession of Tiberius Caesar, we shall consider only the astronomer's view of these events. If we understand the evolution of the proleptic Egyptian calendar and Ptolemy's *Canon*, as propounded and explained by Censorinus, it appears that, at the time under consideration, Thoth one, or the Egyptian New Year's day, fell on August twentieth, A. D. 14. Augustus Caesar died,

as historians tell us, on the nineteenth of August, A. D. 14; consequently on the last day of the preceding Egyptian year, which, as we have said, was August nineteenth. To this fact, and to this alone, it is due that the Egyptian year, then and there concluded, was ascribed to the great emperor as the forty-third fully completed year in the *Astronomical Canon*. If he had died two or three days sooner, he would not have been accredited with that particular count. And if, according to Prof. Totten and his predecessors, Augustus had died an entire twelve-month earlier, that is to say, on the nineteenth of August, A. D. 13 [instead of 14], he would not have been invested with the slightest shadow of a consideration for this assignment to Nab. 761, unless it be, at the utmost extreme of improbability, under the pretext or subterfuge that his death was kept secret or concealed for two or three days for the express purpose of carrying him over the first day of Thoth of Nab. 761, by so doing enabling Ptolemy and Censorinus et al. to score another count for Augustus. But enough has been said to satisfy the serious student of history and chronology that the simplest way of reading the *Astronomical Canon* aright is to consider the series as representing fully completed vague Egyptian years, chosen as such exclusively with a view to avoiding fractions, eliminating confusion and reducing the possibility of error to a minimum. So, to connect the actual reigns of Ptolemy's kings with the count of canonical years, contact at the point of their full consummation. In other words, count the *last* days instead of the *first* as the days of reckoning, and you will find the *Canon* of Ptolemy, as Hy. Fynes Clinton calls it, "our safest Guide."

It will be needless to extend the verification of the *Canon* any farther. Having reached and reviewed that section of it which touches upon what Prof. Totten terms "the heart of history," in part because there prevails therein the greatest wealth and abundance of historical evidence and chronological proof, we may safely reserve the further consideration of the remainder of the *Canon* for those points of interest which fall within the narrower scope of our calendric research. From the middle of the third section, dealing with the Greek rulers of Egypt, Phil. Era 144 or Nab. 568, to the end of the fourth section, closing with the "kings of the Romans," in Phil. E. 483 or Nab. 907, or, in more familiar terms, from J. P. 4534 or 180 B. C. to J. P. 4873 or 160 A. D., we shall take constant cognizance of this thoroughly authenticated masterpiece of time-measurement, from reign to reign, and almost from year to year, comparing the historical with the canonical and vice versa, coming out of the greatest chaos and pandemonium of contradiction with the triumphant conviction that our knowledge of the truth about ancient matters

of fact is owing to the soundness and solidarity of the Ptolemaic *Canon*. We shall therefore break off further contemplation of the *Canon* at this time in order that we may here and now take up the consideration of the Greek mode of keeping time by means of the quadriennial series of Olympic Games.

VOLUME I. CHAPTER III

THE OLYMPIADS

While we are passing through the region of chronology denominated by Prof. Totten "The Heart of History," because of the palpable transition from comparatively poor and meagre chronology into the wealth and abundance of richly authenticated history, let us pause a moment to examine the claims of those chronologists who profess to find a basis for their generally prochronistic reckoning in the Olympiads. The foundation for their belief is sought and supposed to be found especially in the alleged earlier occurrence of certain solar and lunar obscurations, which are reported, in terms of the Olympiad scale, during this period of history.

There is, in the first place, the eclipse of the sun on April nineteenth, 481 B. C., by which it is claimed that the invasion of Greece and the whole series of Olympic Games must be boosted a year higher up the scale. Then there is the solar eclipse on March twenty-first, 424 B. C., the lunar eclipse on August twenty-seventh, 413 B. C., and the solar eclipse of September third, 404 B. C., by which respectively the beginning, the eighth and nineteenth years, and the end of the Peloponnesian war are all lifted up a year higher in the scale. And, last but not least, there are the three lunar eclipses of December twenty-third, 383 B. C., June eighteenth, 382, and December twelfth, 383 B. C., by which Dr. Jarvis proves only the beginning of Nabonassar's Era to have been on the twenty-sixth of February, 747 B. C.; Mr. Page disproves the theory of the moon's acceleration advanced by Ferguson; and Prof. Totten neither proves nor disproves anything by means of these phenomena of Ptolemaic fame. In view of the fact that we have already found the Ptolemaic *Canon* to be a well-authenticated product of astronomical and chronological science, which may now be fairly used by us as an authority fit to build upon, let us begin this review by taking up first the three eclipses of the moon made famous by the use to which they have been put first by Hipparchus and Ptolemy, and then by Ferguson and Page. In consideration especially of the fact that it has been said by Prof. Totten (*Our Race*, No. 12, p. 229) that "this has been *verified* by Page in *New Light from Old Eclipses* (pp. 21-26), whose absolutely accurate figures, 383 B. C., December twenty-second, 18h. 22m. 13s., astronomical time, or 6:22 A. M., December twenty-third (sunrise at 6:56 A. M.) are

to be taken in lieu of the old tables (to wit: 383 B. C., December twenty-third, 19h. 6m., or December twenty-third, 8:15 A. M., for middle of eclipse at Babylon)," let us see what becomes of the chronological elements of Ptolemy's celebrated theorem. Prof. Totten has the grace to mention the original date, "Phanostratus being Archon of Athens," but Mr. Page does not so much as exhibit this name on the pages of his book. So lost is he in the role of an astronomer that he forgets the part of a chronologer, which it is his principal aim to play. He utterly fails to state whether the archonship of Phanostratus remains in connection with the first of these eclipses in 383 B. C., or whether another eclipse is to be sought in 384 B. C., to be hooked up with the eponymous office of the Athenian. The whole performance of Mr. Page makes sense only when the admission is made, candidly and courageously, that Ptolemy's date was right, and this, written out more fully was: "When Phanostratus was archon at Athens in the second year of the ninety-ninth Olympiad," which corresponded to the second half of J. P. 4331 or 383 B. C. and the first half of J. P. 4322 or 382 B. C. In other words, the right eclipse, correctly dated, supports the common chronology, adopted and endorsed by the majority of men, which places the ninety-ninth Olympiad in J. P. 4330 or 384 B. C. to J. P. 4334 or 380 B. C., and the beginning of Olympiadic years in J. P. 3938 or 776 B. C.

Assuming, then, that the line of Olympic years runs straight through J. P. 4330 or 384 B. C. and J. P. 4234 or 480 B. C., the year Xerxes, invading Greece, found the people celebrating the seventy-fifth Olympiad, we are justified in drawing this line immediately through 465 B. C. for the fourth year of the seventy-ninth Olympiad; through 433-432 B. C. for the fourth year of the eighty-sixth and the first of the eighty-seventh Olympiad; through 424 B. C. for the fourth year of the eighty-eighth Olympiad; through 413 B. C. for the fourth year of the ninety-first, and the first of the ninety-second Olympiad; through 404 B. C. for the first year of the ninety-fourth Olympiad; and through 394 B. C. for the third year of the ninety-sixth Olympiad, particularly so, when we consider that the terminal dates of the Peloponnesian War are permanently fixed by a set of eclipses which cannot be moved, and four of the intervening contests are so bound up with intermediate years of the war that they, too, are immovable. And, not to omit any means of riveting and welding the several years of this memorable epoch into one consolidated body, the annual terms of office held by the archons of Athens are transmitted to us so singularly intact, so untouched by mishaps or mistake, accidental error or purposeful intrigue, that their age-long register represents a roll of honor and a file of

time-recording hardly equalled or excelled by any other nation any time. The list of Roman consuls has been called "infallible succession" (by Epiphanius): the register of Athenian archons was that, if any human order could ever be so. Tied up with the Olympian contests, which always occurred in clusters of four, never more and never less, and which, furthermore, were bound up in dozens, three teams of four to each dozen, never more and never less, these muster rolls of public officials display a degree of regimentation not surpassed by the Macedonian phalanx or the Roman legion. The Olympiadic count, therefore, was simply bound to be right.

If, then, we compare the eclipses of the hundred years from 480 to 380 B. C. with the kindred team of eclipses of the century from 25 B. C. to 75 A. D., making allowance for the difference of two or three days, we shall see that, as the last three eclipses, all of the moon, (v.z. those of Thoth twenty-sixth, Nab. 366, or December twenty-second to twenty-third, 383 B. C., of Thame-noth twenty-fourth, Nab. 366, or June eighteenth, 382 B. C.; and that of Thoth sixteenth, Nab. 367, or December twelfth, 382 B. C.), proven to have happened in the second and third years of the ninety-ninth Olympiad, when Phanostratus was archon in the former and Evander in the latter, may be compared with the partial eclipse of the moon on December twenty-second, 74 A. D., and the two total obscurations on June seventeenth and December eleventh, 75 A. D.; so, the solar eclipse of April twentieth, 25 B. C., may be set for the sake of comparison beside that of April nineteenth, 481 B. C., which Jarvis, Page, Totten, and others, say was the darkening of the sun which happened when the Persian army at Sardis was about to leave winter-quarters for Abydos, and also the one which, happening at the commencement of spring, anteceded the summer of that same year in which the Greeks celebrated the Olympics. But the seriation of the Olympiadic years requires that a stadium year occur in the following twelve month, J. P. 4234 or 480 B. C. Furthermore, a comparison of the eclipse of the sun on April seventh, 24 B. C., suggests that we identify the solar eclipse of April sixth, 480 B. C., as the prodigy which foreboded a dark issue to the Persian invaders, but bespoke a triumphant consummation to the hosts of attendants at Olympia. Finally, comparing the eclipse of October second, 25 B. C., with that of October thirteenth, 481 B. C., as the solar eclipse which took place while the Spartans were at work on the wall in defence of Sparta, we may select, as corresponding to that of October second, 24 B. C., the solar eclipse of October twelfth, 480 B. C., as the real obscuration which witnessed the defence of Sparta in the autumn of Olympiad 75¹. The location of the Olympiads, therefore, on

the true Scale of Time must have been that of the commonly accepted chronology.

Almost half a century after the invasion of Greece by Xerxes, or, to be more precise, at the expiration of exactly a dozen Olympiads, i.e. at the end of the $[74+12=]$ 86th Olympiad, a calendric event of the first magnitude took place, the introduction of the Metonic Lunar Cycle. This momentous event may be computed and permanently fixed independently of the Olympic Scale. It was enacted on the thirteenth of Scirophorion of the Olympiad year when Apseudes was archon at Athens, on the day which corresponded to the twenty-first of Phamenoth of the Egyptian Era, Nab. 316. This was the day of the Summer Solstice J. P. 4282 or 432 B. C. But the date of the first inauguration of Meton's Lunar Cycle is so involved in the series of Olympiads that there is no getting away from its mathematically prescribed course. "Ever after this year," says Prof. Totten, "the Greeks estimated the recurrence of their Olympic Games by means of these Golden Numbers [of the Metonic Cycle], beginning the cycle this year *with the new moon that followed the Summer Solstice.*" The beginning of the Cycle is thus made identical with the beginning of the eighty-seventh Olympiad, and inseparably with it, the beginning of the year when Pythodorus was archon at Athens. Nor is even this determination of its proper place exhaustive of corroboration. In addition to the fact that the Peloponnesian war began in the tenth month of the archonship of Pythodorus, Thucydides mentions the fact that this first year of the war was marked by a notable eclipse of the sun. He says (Lib. II. cap. 28): "The same summer, on the first day of the lunar month, at which time alone it can possibly fall out, there was an eclipse of the sun in the afternoon. The sun looked for a time like the crescent of the moon, and some stars appeared, but the full orb shone out afterwards in all its lustre."

"All this," says Dr. Jarvis (*Chron. Intr.*, p. 38), "is verified by astronomical calculation. The eclipse took place in the 4283rd year of the Julian Period [=431 B. C.] on Wednesday, the third day of August; and the moon changed at Athens one minute and three seconds after three o'clock in the afternoon. A little more than eight digits were covered by the shadow, and the eclipse continued two hours and eleven minutes."

"Modern authorities," says Mr. Page (*New Light*, p. 33), "agree that this eclipse happened in the afternoon of August third, 431 B. C., and that the sun went down eclipsed. The historian who saw and recorded it says that it was not total, and that the sun became full again before it went down. The corrected tables agree with the statement of the historian; the old tables do not so agree."

And Prof. Totten, who follows them, remarks: "In this first year of the war, on August third, at 5h. 6m. 56s., p.m., the sun was eclipsed at Athens to ten digits, so that the stars were seen (Thucyd. Lib. II.; Pent. [Plut.] in *Pericles*; Vol. Max. Lib. VIII. cap. 2, all of which has been absolutely verified by Page in *New Light from Old Eclipses* p. 33). This year cannot be shaken. It stands immoveably (431 B. C.)...and we are convinced that any system of Chronology which locates the beginning of the Peloponnesian war at any other place upon the Scale, to that degree disturbs the true order of Chronology, and hence of History," etcetera.

But here we may ask, What is it that has been so absolutely verified? and what contention is it that has been vindicated? Prof. Totten repeats the note of time: "In this first year of the war," yet transports the archonship of Pythodorus and therewith the first year of the eighty-seventh Olympiad to the previous year, from 432 to 433 B. C. Mr. Page, stretching a point, jumps at the conclusion that the interval between the retreat of Xerxes and the commencement of the Peloponnesian war was a full compass of fifty ($12 \times 4 = 48 + 2 = 50$) years, which must be terminated at the near end by 431 and at the far end by 481 B. C. And Dr. Jarvis, acting at once on the premise (expressed in words) that "the *first* year of the eighty-seventh Olympiad ended about the last of June preceding the eclipse" [August third, 431 B. C.]; and, at the same time, on the assumption (not expressed) that it was the *second* year of the eighty-seventh Olympiad that ended in the summer of 431, proceeds to draw his conclusions thus: "Eighty-six whole Olympiads, or 344 years, had preceded, and the first year of the eighty-seventh Olympiad, ending about the last of June preceding the eclipse. Deducting, therefore, these $[344 + 1 =]$ 345 years from 4283, it brings the beginning of the first Olympiad to about the first of July in the year 3938 of the Julian period."

On the strength of such ratiocination, what are we to think of these conclusions? If the eclipse of August third, 431 B. C., was indeed, as agreed by all authorities, the eclipse of the sun that happened in the first year of the war, then it happened about three months or thereabouts after the beginning of the war in April, some ten months or so after Pythodorus had entered his office on July first, 432 B. C.; and hostile transactions began, not *one year and ten months*, as Jarvis, Page, and Totten assume, but, as the historian says, some *ten months* after Pythodorus had entered upon his archonship. Consequently the eighty-seventh Olympiad commenced, not in the summer of J. P. 4281 or 433 B. C., but in the heat of J. P. 4282 or 432 B. C., and the first Olympiad on the Scale commenced, not in J. P. 3937 or 777 B. C., but in J. P. 3938 or 776 B. C.

And if, beside, we compare the eclipses of A. D. 25-27 with those of 432 to 430 B. C., in search of an obscuration still more suitable in the opinion of these anachronistic chronologists, we find that the solar eclipse of August twelfth, 25 A. D., would suggest an obscuration, not for the better, but for the worse, for this was not only a partial and insignificant one at best, but invisible altogether at Athens and the near East. Good reason why they utterly failed to locate the archonship of Pythodorus and the beginning of the Peloponnesian war a year higher up, in 433 B. C.

Once admitted that this long drawn out belligerency in the Peloponnesus began in the spring of 431 B. C., six different years of the war fix six different Olympiads immoveably in their proper place. They are indissolubly connected by the historian: the eighty-eighth Olympiad by the fourth year of the war, the eighty-ninth by the eighth, the ninetieth by the twelfth, the ninety-second by the nineteenth and twentieth, and the ninety-fourth by the twenty-seventh. It would be needlessly tedious to go into all the particulars and details of this summary. Enough to match the second, fourth, and fifth cases.

"Thucydides mentions another solar eclipse," says Dr. Jarvis (*Chron. Intr.*, p. 39), "which took place just at the beginning of the eighth year of the Peloponnesian war. This, by astronomical calculation, is found to have been on Wednesday, the twenty-first of March, in the year 4290 of the Julian period [or 424 B. C.]. If the war began in the spring preceding the second year of the eighty-seventh Olympiad, then the seventh year ended, and the eighth began, in the spring preceding the eighty-ninth Olympiad; and the solar eclipse, being on the twenty-first of March, was more than three months before the expiration of the fourth year of the eighty-eighth Olympiad, that is ($88 \times 4 = 352$) before the close of the 352nd year. This sum being subtracted from 4290, gives 3938 as the beginning of the Olympiads."

Now, if, in this argument, Dr. Jarvis did not adroitly shift the time of the solar eclipse from the very beginning to the very end of the eighth year of the war, it would look and sound like good common chronology. But right there is the trick by which he can make it appear as if his own chronology were well-founded. When Thucydides says "*early* in the following summer" he means, as in the following chapter, "Very early in the *spring* of the ensuing summer," that is to say, Early in the beginning of the summer's campaign following immediately upon the winter of the seventh year. Being mentioned in the very first sentence, before the expedition against Cythera, and the city of Magara, and before Thucydides' own expedition into Eion, the partial eclipse of the sun must be placed, not *after*, but *before*, this sum-

mer's and winter's campaign. So, instead of locating the expiration of the fourth year of the eighty-eighth Olympiad in the summer of J. P. 4289 or 425 B. C., as Dr. Jarvis, in his system, elsewhere does, it must be placed, as perversely done here, in the summer of J. P. 4290 or 424 B. C. The result is, therefore, this: that the first of all the Olympiads began, not in J. P. 3937 or 777 B. C., but in J. P. 3938 or 776 B. C., as commonly received.

It might further be merely suggested that a comparison of 425 B. C. with 32 A. D. would show that, in the former year, there were two very small and unobtrusive obscurations of the sun, and they, of course, were too obscure to serve as the obscuration demanded by history. It was, therefore, best not to attempt to foist on either one of them the character of an historical eclipse. Hence the resolution to abide by the phenomenon of the common chronology.

In the further progress of his argument, Dr. Jarvis (*Chron. Intr.*, p. 40) goes on to say: "Thucydides further mentions a very remarkable lunar eclipse in the nineteenth year of the Peloponnesian war. The Athenians, under Nicias, were preparing to embark by night, near Syracuse, when at the very moment of being ready to sail they were terrified and induced to abandon their purpose, by an eclipse of the moon.

"The disastrous consequences of this delay to Nicias and the Athenians, caused Plutarch to make this eclipse the subject of much reflection in his life of Nicias. It is also mentioned by Diodorus Siculus, who places it in the fourth year of the ninety-first Olympiad, when Cleocritus was archon at Athens. By the astronomical tables for that meridian, it began at Syracuse a little after ten o'clock P. M., lasted three hours and forty-eight minutes, and ended at nearly two o'clock in the morning of August twenty-eight in the year 4301 of the Julian period. There were fifteen digits eclipsed; so that we need not wonder at the consternation it produced, or the notice taken of it by ancient historians. If the first year of the Peloponnesian war coincided with the year 4283 of the Julian period, then, by adding eighteen solid years [$4283 + 18 = 4301$] we are brought to the 4301st year as being the nineteenth; and if it was in the fourth year of the ninety-first Olympiad, then [$90 \times 4 + 3 =$] 363 will give the number of solid years which preceded it. These subtracted from 4301 give the year 3938 of the Julian period as the first year, reckoning from midsummer, of the first Olympiad."

Again we might say, if this lucid exposition of the case had been intended to serve the purpose of defending and fortifying the common system of chronology, it has fully accomplished its purpose and leaves nothing to be desired. The reverend author completely forgets that, according to his own theory, the fourth

year of the ninety-first Olympiad ought to coincide with J. P. 4300-1 or 414-13 B. C., and that all dates arrived at by the reckoning of the Olympiads should be moved a year higher up the Scale than they are at present. We therefore owe him a vote of thanks for this splendid vindication of our cause.

There being only one more point of contact between the Olympiadic and the Peloponnesian war dates, we may well rest content with a brief survey of the situation. The war had lasted twenty-seven years, and, by a rule of thumb, should be marked closed in the fourth year of the seventh Olympiad involved. This would be Olympiads ninety-three to four. The city of Athens having been taken, as Plutarch informs us, on the sixteenth of the month Munichion—(the very day on which the Athenians had overthrown the barbarians in the sea fight at Salamis)—the Lacedaemonians took over the government of all Greece, and held it until dispossessed of it by the Thebans in 371 B. C. About the time the Peloponnesian war ended, Darius Nothus died, having acceded to the throne during the eighth year of the war and died at the end of the twenty-seventh. His accession took place in the first year of the eighty-ninth Olympiad and the 325th year of the Nabonassan Era, his decease in the fourth year of the ninety-third Olympiad and the 344th year of the Nabonassan Era. Both standards of time measurement are rigid and rigorously consistent, but, to make this last date, if possible, still more immobile, the Greek general and writer Xenophon has recorded an eclipse of the sun as falling in this year on September second, 21h. 12m. or 9h. 12m., A. M. of September third, 404 B. C. By punctuating this year, he at once marks indelibly the proper place of the ninety-fourth Olympiad, when, in its fourth year, 401-400 B. C., he and his ten thousand enacted that most famous march of history, the Anabasis. Surely, if the intertwining, interlacing and interlocking of references and cross-references can do anything toward substantiating and consolidating any system of time-determination, the Olympiads, at least of this section, have received their full benefit.

That the Olympiads, firm enough in themselves, do not otherwise lack support and confirmation, may be gathered from an instance, that of the ninety-sixth occurrence of the games. It is the line of Pythian games which this time corroborates the series of the Olympiads. The fact that the Pythian games were contested in the third year of an Olympiad, in the autumn or at the commencement of the Attic year being established, and the further fact that the battles of Cnidus and Coronea were fought shortly before and after an eclipse of the sun on the fourteenth of August, 394 B. C., being well ascertained; it is sure beyond the shadow of a doubt that the third year of the ninety-sixth

Olympiad, or the $[95 \times 4 = 380 + 3 =]383^{\text{rd}}$ Olympiad year, commenced in the summer of J. P. 4320 or 394 B. C., and not in the year preceding it.

Still another line of reinforcement might be found in the series of years reckoned from the foundation of Rome, if we were permitted to appeal to the more obscure and ostensibly still unknown quantity in behalf of a quantity less doubtful. We refer to the authoritative citation of this Roman Era by the dictator and deliverer of Rome, Camillus, when, after the battle of Allia, which was fought on the seventeenth of July, hence *after the Summer Solstice* preceding the stadium of the ninety-eighth Olympiad, he declared: "Romans, this present year is the three hundred and sixty-fifth of the city (see Livy, *Hist.* B. V. C. LIV). And so it was, according to the historical, official, and therefore only valid mode of reckoning then employed, the Capitoline computation. In accordance with this, the authentic, monumental and documental Capitoline computation, the 365th year of the city of Rome corresponded in its major part with the stadium year of the ninety-eighth Olympiad. Consequently, if there can be no debate as to the year of the invasion of the Gauls, (as, for instance, the ancient historian Dionysius declares: "It took place in the first year of the ninety-eighth Olympiad"), then there can be no debate as to the proper emplacement of the Olympiads on the Scale of Time. But, seeing that this enumeration of years is itself supposed to be an unknown quantity, we shall waive the use of it at the present time, and rather utilize this famous synchronization in support of the Roman era by the then authenticated scale of Olympiad years.

With this digression in the direction of Roman chronology, or the section of ancient history with which we are most concerned, we return to the point from which we began our survey of the celestial phenomena, which either vindicated the true chronology or else convicted the false of error. We confined our inquiry to that section of Ptolemy's *Canon* which he devoted to the reigns of the Persian kings. We shall now proceed to the third section of the *Canon* which is dedicated to the successors of Alexander the Great, the kings of the Greeks in Egypt.

In contradistinction to the "Heart of History," as Prof. Totten styles the preceding section, we shall call the coming one, in Totten's terms, "The Key of History." For, whereas it was this epoch in which a great and important part of Jewish history was composed and published, when the Syro-Macedonian mode of computation was initiated, and the Era of the Seleucidae, together with the Syro-Macedonian Calendar, was introduced in Judea; and whereas it was during this period, that the wars for universal supremacy were fought which brought on one govern-

ment, one civilization, one calendar for the whole then-known world, it is a fitting description of this section of history to call it the "Key" or "Open Sesame" of History. The task now devolves on us to show how well it deserves the name.

As the set of three lunar obscurations observed by Hipparchus at Athens in 383 and 382 B. C., served the purpose of marking the date of the Olynthian war in a permanent and imperishable fashion by hooking it up with the planets and their movements, so the set of three similar lunar eclipses compared with them by Ptolemy answers the purpose of perpetuating the date of the second Punic war in the same imperishable manner. We are not interested in the reasons for this comparison. We are interested only in the manner and means of doing this. While the former was commemorated in terms of the Olympic scale by virtue of the archonships of Phanostratus and Evander, the latter set is memorialized in terms of the Calippic Period, thus: Calippic Period II 54 and II 55. If it was the intention of Ptolemy to adopt a more sure and excellent way of dating than by means of the eponymous terms of the Olympiads, he succeeded admirably. For the Calippic Period, introduced in the third year of the 112th Olympiad and conducted along the line of the Olympiads in blocks of seventy-six ($4 \times 19 = 76$) Olympiad years, is not only inextricably tied up with this series of unmistakable chronological value, but is so interwoven with the calendric conditions of solar and lunar revolutions, that a date so defined by cycles and calendars of the Calippic Period cannot possibly be moved.

As stated before, the Period composed of four Metonic cycles and styled the Calippic in honor of the Athenian astronomer Calippus, was introduced into popular and official use as the standard of time-keeping in Grecian lands, in the third year of the 112th Olympiad. By Prof. Totten's own admission, it was the Summer Solstice that succeeded the battle of Arbela that witnessed the induction of the new cycle called by his name. But the battle of Arbela was fought eleven days after a total eclipse of the moon (which happened on the twenty to twenty-first day of September, 331 B. C. Hence it follows that the Cycle of Calippus was first put to practical use in the third year of the 112th Olympiad, or the 447th year of the entire Olympiad series. That it was *not*, as Prof. Totten protests, "first practically used at Summer Solstice of the year [329 B.C.] to calculate the [113th] Olympiad is proved by, at least, five synchronizations within the first Period.

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| 1. | Cal. P. I. 36 = Nab. 454 = J. P. 4419-20 or 295-4 B. C. |
| 2. | " " I. 47 = " 465 = " 4430-1 " 284-3 " |
| 3. | " " I. 67 = " 504 = " 4469-70 " 245-4 " |
| 4. | " " I. 75 = " 512 = " 4477-8 " 237-6 " |
| 5. | " " I. 82 = " 519 = " 4484-5 " 230-29 " |

In the face of such evidence (see Clinton's *Fasti Hellenici*, Vol. II, pp. 413th sc.) it is futile to attempt a different location of the Calippic Period or of the Olympic Scale. The place of either and of both is absolutely secure.

There is, however, another auxiliary line of defence at our disposal in the years of Philip, the successor of Alexander, which begin, hieratically or canonically only, before Alexander's death, but in reality, with and after his demise. In the incomparable synchronization of Censorinus, who penned this famous symposium of dates in 238 A. D., there is also noted the current year of the Philippean Era, or the Era of Alexander. Being an Egyptian era, it concurred with the Nabonassan method of computation in beginning with the first of Thoth, but being numbered and enumerated by the finals of the year. Alexander, having died at the end of May or the beginning of June, had passed the "final" of 424 Nab. and the "first" of 425 N. E., but not the final of 425, which fell on November eleventh, 323 B. C. Consequently, Nab. 424 was reckoned the last full and perfect year of Alexander, and Nab. 425 the first year of Philip, his successor. But Alexander died, according to all authorities, in the first year of the 114th Olympiad, or in that Olympiadic year in which Hegesias or Agesias was archon at Athens. Hence it follows that the stadium year of Olymp. 114. and the archonship of Hegesias began in the summer of 324 B. C., the same in which the proclamation for the restitution of the exiles was issued, and the same which preceded the death of Alexander in the spring of 323 B. C. On November twelfth, 324, or Thoth first, the New Year's day of the Egyptian year, following closely upon the stadium of Olymp. 114., began the next Nabonassan year 425, which Alexander did not survive, but which Philip, his brother Aridaeus, outlived and inherited as his first year on Ptolemy's Canon. His seven full years and the five of Alexander Regus convey us to the next Olympiad, which, for our greater assurance, is supported and sustained by another great chronological era—the 117th Olympiad, borne out by the Era of the Seleucidae.

This Era of the Seleucidae, or the years of the kingdom of the successors of Alexander in Syria and Asia Minor, though not mentioned by Censorinus, was one of the greatest and most important means of time-keeping in the Orient. The occasion of its commencement was the capture of Babylon by Seleucus, after the victory of Ptolemy and Seleucus over Demetrius, in the summer of that Olympiadic year in which Polemon was chief magistrate at Athens. This was the first year of the 117th Olympiad. It is borne out by too many proofs and strong confirmations to be repeated here. Suffice it to substantiate it here by the astronomical evidence of its third year. Following

Polemon in the first, and Simonides in the second year of the 117th Olympiad, came Hieromnemones in the third. "In the chancellorship of Hieromnemones at Athens," says Diodorus (B.XX.C.I), . . . Agathocles, being routed at Himera in Sicily by the Carthaginians, resolved to leave a strong garrison in the city [of Syracuse], and with the choicest of the rest of his forces to make a descent into Africa. . . . Though closely pursued by the enemy, he got off safe from them by the advantage of the night (beyond all hope). The next day, there was such an eclipse of the sun that the stars appeared everywhere in the firmament, and the day was turned into night." This eclipse has been verified as the total benightment of the sun on August fourteenth, J. P. 4404 or 310 B. C., at 20 h. 5 m.; 11 digits 10'. But if this unusually dark obscuration of the sun took place in the third year of the 117th Olympiad, or the 467th year of the Olympic series, then the stadium year of this, the 117th Olympiad, must have fallen in the summer of J. P. 4402 or 312 B. C., as already indicated by the initial year of the Seleucic Era, and the first of all Olympiadic years must have had its start, not in J. P. 3937 or 777 B. C., but, as accepted by most chronologers of note, in J. P. 3938 or 776 B.C.

We should wander too far away from our main purpose, which is to find the key to the reconstruction of the Syro-Macedonian or Jewish calendar, if we stepped aside to verify every single Olympiad regardless of its reference or correlation to the subject in hand. So we shall select only three more examples of Olympiadic years which can be placed, and proven to be correctly placed, independently of other standards of time-measurement; to wit, the third year of the 140th Olympiad, the fourth year of the 147th Olympiad, and the fourth year of the 152nd Olympiad. With this last date in terms of the Olympic scale, we shall stand on the threshold of the next section of history, which, with Prof. Totten, we shall style "The *Focus* of History," because in it we shall see all lines of evidence converge to a common center: the middle point or the focus, which we are seeking to find, the date of the first Easter of the Christian dispensation.

We select the first instance of these three Olympic dates because, if once determined, it will tend to define the end of the period taken up by the second Punic war (since seventeen years, added, let us say, to Nab. 530, will take us to the end of that bloody period, Nab. 547 or 201 B. C.). The third year, then, of the 140th Olympiad, rendered so outstandingly famous by the extraordinary events enacted during its brief span of four years, is rendered pre-eminently incontrovertible, first by the eclipse of the moon which occurred in the first half of that Olympiadic year, and then by the battle of the Romans in Etruria in the second half, which corresponded to the consulate of C. Servilius Geminus

and C. Flaminius II. (see Polyb. B. V. C. 105). Not to stress the evidence by the roster of the Roman consuls, let us content ourselves with the proof furnished by the eclipse. This heavenly phenomenon, which was regarded as a prodigy and preternatural portent by the Gauls in the army of King Attalus (who served as auxiliaries to Antiochus), occurred on the first of September, 218 B. C., and, falling in the forepart of an Olympiad year, (as required by the narrative), was the only lunar eclipse visible in Palestine within the scope of an Olympiad. Securing, therefore, the commencement of the third year of this Olympiad as having come to pass about two months before its own occurrence, this eclipse secures also the beginning of the first year with its stadium as falling in the summer of 220 B. C. It also secures the end of the fourth year as falling due in the summer of 216 B. C., when Polybius tells us the Roman defeat at Cannae took place practically within its scope, but, in reality, as Roman accounts tell us more precisely, on the second day of August, 216 B. C. After a duration of seventeen years, the second Punic War was concluded in J. P. 4573 or 201 B. C., when the lunar eclipse computed by Ptolemy occurred on the sixteenth of Mesore, N. E. 547, or September twenty-second, 201 B. C.; when the fourth year of the 114th Olympiad ran its course from mid-summer, 201 B. C., to mid-summer of 200 B. C., terminating the 576th year of Olympiad seriation in the summer of 200 B. C. and thereby vindicating its commencement in 776 B. C.

The next instance of dating by the Olympic Scale which we briefly want to consider, is the fourth year of the 147th Olympiad. In this fourth year of the 147th Olympiad the Roman consul Cnaeus Manlius wintered at Ephesus in Asia, while his colleague, M. Fulvius, took the citadel of Sume in Cephalenia by a night surprise. This was the year succeeding that in which L. Cornelius Scipio and C. Laelius were consuls, and in which Scipio, henceforth known as Asiaticus, administered a decisive defeat to Antiochus at Magnesia in Asia Minor. By means of a remarkable eclipse of the sun in the prime time of this year we prove the correct emplacement of this year's consulate and the next year's parallelism with Olympiad 147th.

Abandoning his contention (*Chron. Intr.*, p. vi) that all ancient events dated in terms of the Olympiads must be placed a year higher than commonly done, and following Petavius, the father of the commonly accepted chronology, Dr. Jarvis identifies the solar eclipse of March fourteenth, 190 B. C., as the eclipse of Scipio's consulate and of the Apollinarian games on the fifth day before the ides of July. His failure to find a more suitable obscuration in the year of his system's place for the consulship of Scipio, viz. in 191 B. C., is sufficient admission that there is

none available. If, then, the spring eclipse of 190 B. C. is the only acceptable darkening of the sun within the approximate locality of the 147th Olympiad, we shall necessarily have to adopt it as such. But if it is, as indeed it is, the true historical happening that harmonized with the season of the year for military activity, that is, with spring rather than mid-summer, then the following year, that of 189 B. C., represents the correct date for the consulship of Cn. Manlius and M. Fulvius and the beginning of the fourth year of the 147th Olympiad. In that case, the termination of the 147th Olympiad and the initiation of the 148th Olympiad would fall in the summer of 188 B. C., and the initial introduction of the Olympic games would fall, not in the summer of 777 B. C., but in the hot season of B. C. 776.

On the other hand, it would be interesting to see just how Mr. Page, a redoubtable advocate of the anachronistic system of chronology, would execute the adjustment of the above-mentioned dates and events. Ordinarily a follower of Dr. Jarvis, who contended that "there is an error of one year [one year too *low*] in the usual reckoning of the Olympiads," Mr. Page, in this instance, elects to follow Dr. Seyffarth, who insisted that there is an error of two full years [two years too *high*] in the common computation of the Olympiads. In his own words (see *New Light from Old Eclipses*, p. 55) he says: "It can be proven that it [the Roman calendar] was correctly kept in 188 B. C., at the time of the great eclipse in Rome spoken of by Livy. This writer says [lib. XXXVII. C. 4]: 'Just at the time the consul went to join the army during the celebration of the Apollinarian games, on the fifth of the Ides of July (July 11), though the sky was serene, the light was obscured in the day time (that is, in broad daylight) by the moon passing over the orb of the sun.' Livy gives, as the date of this eclipse, July eleventh; our tables, both old and corrected, make it on the morning of July sixteenth; thus proving that, at that time, their lunar year agreed very nearly with our solar year."

If, now, for the sake of argument, we accepted Mr. Page's own theory of the Olympiads, we should find Livy's eclipse and concomitant consulate of Scipio and Laelius reduced to the second year of the 148th Olympiad, in direct contradiction to Polybius, the historian who states expressly that Cn. Manlius and M. Fulvius were consuls in the fourth year of the 147th Olympiad, and, consequently, that their immediate predecessors, Scipio and Laelius, officiated in the third year of the same Olympiad. And if, on the other hand, we embrace the authentic date of Polybius, and with it, the conclusion of Mr. Page that Livy's eclipse and Scipio's consulship fell in 188 B. C., then the fourth year of this suppositious 147th Olympiad would syn-

chronize with the Julian year 4527-28 or 187-186 B. C., and the first year of the Olympic Scale as a whole would start, not in J. P. 3938 or 776 B. C., nor in J. P. 3937 or 777 B. C., but in J. P. 3940 or 774 B. C. And all this inconsistency and confusion due to the false premises of a wilfully detached and there woefully disconnected chronology!

Finally, in order not to be guilty of domiciliating ourselves in a glass house, while throwing stones at others, we shall now take up the last instance of dating required to conduct us to the very border of that epoch which Prof. Totten has termed the "Focus of History." With this last instance we close the gap remaining unfilled in the scale of Olympiadic years.

According to Porphyry (*apud Eusebium Chron.* I. 38, p. 177. See Clinton's *F. H.*, Vol. III. pp. 82 and 305), the battle of Pydna was fought in the fourth year of the 152nd Olympiad. Now, in spite of the fact that their own dictum demands of the propagators of the prochronistic system of chronology that they invest the fourth year of their anachronistic 152nd Olympiad with all the historical events, astronomical phenomena and terrestrial transactions peculiar to that Olympiadic year (in this case, the companion piece or counterpart of 170-169 B. C.), Mr. Page *New Light*, p. 55-56) and Prof. Totten (*Our Race*, No. 13, pp. 69-70) not only fail utterly to endorse their own main contention, but even so far forget themselves as to vindicate the common chronology, altogether oblivious of the fact that for the nonce they are serving the common cause. Unaccountably, inconsistently, Mr. Page declares: "*Twenty* years after that date [i.e. that of Livy's eclipse and the battle of Magnesia in the consulship of Scipio and Laelius], on the eve of the decisive battle of Pydna, C. Sulpicius Gallus, one of the legionary tribunes, gave out that there would be an eclipse of the moon that night, thus preventing the alarm which this supposed portent would have caused to the Romans. The Macedonians, on the other hand, were horror struck; the eclipse proves that, at that early date, the Romans had among them many men who were able to correct the lunar, and make it agree with the solar year."

How Sulpicius Gallus made the lunar and solar years agree in this case, or how he himself reconciled the historical date and the actual occurrence of the prodigy, Mr. Page does not explain. In the foregoing case, the eclipse before the battle of Magnesia fell on the V. Id. Quint. (July eleventh), coincident with March fourteenth, creating a discrepancy of 119 days, according to the majority of chronologists, but, according to Page, with a difference of only five days, he having synchronized the eclipse with July sixteenth. Only twenty years later, the eclipse prior to the battle of Pydna took place, according to Eutropius (R. H. B. IV.

C. VII) on the III. Nones September (September third), which has been found, by the vast mass of chronologists, coincident with June twenty-first to twenty-second, J. P. 4546 or 168 B. C., establishing a calendric discrepancy of eighty-five days. Yet not a word of demurrer is heard! The champion of the dissenting system agrees with the commonly accepted view! In like manner, Prof. Totten, a fervid admirer and follower of Mr. Page, instead of transferring the historic contents of Olymp. 152⁴ from the Julian J. P. 4545-6 or 169-8 B. C. to the preceding year J. P. 4544-5 or 170-169 B. C., as of right he ought to attempt to do, concurs without dissent with the claims of the common chronology in these words of his own (*Our Race*, No. 13, p. 69):

"By examining the *Harmonized Scale of Time*, p. 72, we are able to identify the particular year under consideration, for in it occurred, as all historians and chronologists of note agree, the battle of Pydna, at the Summer Solstice of 168 B. C., in the 156th year of the Philippic era. Here the Romans defeated Perseus and destroyed the Macedonian monarchy. The day *before* the battle C. Sulpicius Gallus, a tribune of the second legion, and the first Roman astronomer on record, came to General L. Aemilius Paullus, the Consul, and warned him of a total eclipse of the moon for that night (June twenty-first, 8h. 2m., Macedonia, 168 B. C.). This was published to the Roman army, but to the Macedonians, not forewarned, it portended what occurred, the end of their kingdom (Livy, Justin, Val. Max., Plutarch in *Aemilio*, etc.)."

As in the case of Mr. Page, there is not one word here about the adjustment or non-adaptation of the foregoing events to the previous year: nothing but the silent admission that this is something that cannot be done. For one thing there was no lunar eclipse in 169 B. C., both visible to the warring hosts and available to the historian as a mark of time. In the second place, the 156th year of the Philippic era (or the era of Alexander) cannot be moved to the preceding twelvemonth. The years of Philip began, as we have seen, canonically with Nab. 425 as year one. But $424 + 156 = 580$, the Egyptian year-date, which, beginning on October fourth, 169 B. C., ended on October third, 168 B. C. Only eighty-nine days of the year coincided with 169 B. C., not enough to take in a September eclipse, even on the extreme hypothesis that the variation of the Roman calendar amounted to merely five days. On the other hand, if the Pydna eclipse occurred in the 156th year of the Philippean Era, then the fourth year of the 152nd Olympiad must coincide with it, for in it, Porphyry asserts, the battle of Pydna occurred. And if, "as all historians and chronologists of note agree," this epochal decisive battle took place in the fourth year of the 152nd Olympiad =

Phil. E. 156 = N. E. 580 = J. P. 4546 or 168 B. C., then the Olympic Scale as a whole began, not in the summer of J. P. 3937 or 777 B. C., but at the Summer Solstice of J. P. 3938 or 776 B. C.

Having thus verified and vindicated a sufficient number of instances of time-determination in Olympic phraseology, especially in those two periods of time styled by Prof. Totten the "Heart" and the "Key" of history, we are now in a position to say that there is no confirmation or proof of a wholesale anachronism or metachronism of the Olympic Era to be found in them. The appeal, therefore, to these two important and most compatible epochs is the most futile possible. For, not only do these sections of history utterly fail to support and corroborate the theories of earlier or later occurrence, as expected, but they serve decidedly to correct the misinterpretation of Censorinus, who is erroneously made to begin the second year of the 254th Olympiad, or the 1014th straight Olympiad year, in the summer of 237 instead of 238 A.D. There are other reasons for interpreting this prince of chronographers as being in line with the majority of chronologists of note, but the testimony of the Olympic dates, such as we have reviewed, is in itself sufficient to place his matchless synchronization in its appropriate setting. We may therefore proceed to the next element of general time-keeping mentioned by Censorinus—the years reckoned from the foundation of the city of Rome.

VOLUME I. CHAPTER IV

THE YEARS FROM THE FOUNDATION OF ROME

The standard of time-determination employed in the Roman republic and empire, best known by its initials A. U. C. and standing for *ab urbe condita* (from the foundation of the city) or *anno urbis conditæ* (in the year from the founding of the city), and generally used in conjunction with the line of annual consulships, is perhaps more frequently than necessary made a matter of controversial debate. It is true, there is a perplexing discrepancy and very confusing variation in the dates assigned by Roman writers to the beginning of the era of Rome, but that, forsooth, is no sign that it is obligatory to burden the columns of a chronological chart or diagram with a variety of reckonings of the same series of year, such as, for instance, the three modes of reckoning the years of Rome attempted by Totten. "To obviate all this confusion," says Prof. Totten (*Our Race*, No. 10, p. 5), "we have harmonized the three several Scales under the column headed A. U. C., and have given the central place to Varro's figures, which are the ones usually adopted, and which place the foundation in 3246 A. M. or 753 Common B. C. The scale of Polybius, which places the Foundation in 3249 A. M., or 750 Common B. C., is indicated by the exponential figure, i.e. the one written to the right and a little above the Varronian, while the Fabian years, which begin with April twenty-first, 3251 A. M. or 748 Common B. C., will be found in a corresponding place below and a little to the right of the Varronian."

But for all this there is no need, and, indeed, no justification. It is even ill-advised, and ill-chosen. A more considerate review of the various modes of reckoning the era will no doubt induce the more thoughtful student to choose only one computation, and that neither one nor the other of the three just recommended. To facilitate our selection let us restate all the different counts of Roman years obtainable. Omitting that of Timæus, which assigned a date as high as thirty-eight years before the beginning of the Olympiads, therefore $776 + 38 = 814$ B. C., they were the following:

Olymp.	6 ²	Velleius Paterculus	754	B. C.
"	6 ³	Pomponius Atticus, Torrentius Varro, Censorinus	753	"
"	6 ⁴	Capitoline Marbles	752	"
"	7 ¹	Cato, Dionysius, Livy	751	"
"	7 ²	Polybius, Diodorus, Eratosthenes, Apollodorus, Nepos, Lutatius	750	"
"	8 ¹	Fabius Pictor	747	"
"	12 ⁴	Lucius Cincius	728	"

Does it require more than one glance to perceive that, in this long list of computations, there is one, and only one, which, by virtue of a certain characteristic, deserves and of right ought to receive, exclusive recognition and adoption at the hands of discriminating chronologists? Well, so it is. There is one of outstanding eligibility. It is the computation known as that of the Capitoline Marbles or Tables. It was the count kept in the Capitol at Rome, the public, official, most widely and most formally authenticated record of the years of Rome, while the rest of them, each and everyone of them, represent the private opinions or personal convictions of individual men. Now we grant that it is possible that even a well-organized government may perpetuate a well-known error, not only for a day, but for a thousand years, (even as the American government and many so-called Christian governments in the world have maintained an error in the count of the Christian Era for hundreds of years), nevertheless it is probable that a constitutional, representative government like the Roman republic would keep up an accurate count of years in their public records and official accounts, on coinage and currency, on every monument erected, on every document recorded, on every memorandum requiring a date and signature, in short in every way, shape, or form in which a business affair or governmental function is rendered legitimate and valid. Such being the case, we shall now put this particular computation, as presumably authorized by the government of Rome, to the test, with a view to ascertaining how well or how ill we should fare if we pinned our faith for historic fidelity to this count.

In order to make sure of the correct emplacement of the *Fasti Capitolini*, as this consular succession of the Capitol is also called, on the chronological column consisting so far of the Julian Period, the Nabonassan Era, and the Olympiads, we, of course, shall not begin with a begging of the question, for such would be our procedure if we attempted to commence with year one. Nothing certain could result from such a speculation in doubt. For another thing the extant fragments of the Capitoline Tables do not reach back to the beginning. As Dr. Jarvis (*Chron. Intro.*, p. 149) informs us, "they extend [only] from the reign of L. Tarquinius Priscus, the fifth king of Rome, to the death of Augustus. They are most perfect from A. U. C. 440 to A. U. C. 531. They designate the reigns of the kings, the succession of the consuls, the appointment of dictators, with their *magistri equitum*, or generals of cavalry, the tribunes of the people, the censors, the triumphs and ovations, with the year of the city, and day of the month on which each was celebrated, and such other notices and dates as were thought worthy of observation." Very justly, therefore, Dr. Jarvis concludes: "They are evidently public

records; and, if they were complete, there could be no appeal from their authority." But, incomplete as they are, they are authoritative as far as they go. And how authoritative they are we shall now proceed to show.

The first instance of the use of the Roman foundation era which can be directly connected with another era of the Scale of Time is the year A. U. C. 365. This number of years was pronounced the publicly well known duration of the city's war-like existence by the dictator interrex M. Furius Camillus, when, the people being bent on forsaking the site, he pleads with them to remain and rebuild the city that had endured such an amount of valorous and victorious warfare. "It is now, Romans," said he, "the 365th year of the city," and we may be sure, if he had been chronologically inclined, he might well have added, "according to our Capitoline computation," for all others were non-existent and unknown to him. But *is* this date, if placed in the light of the Capitoline count, correctly emplaced?

Another distinguished Roman writer, the epitomator Justin (B. VI. C. VI.) assures us that "this year was not only remarkable for a peace being suddenly made throughout Greece, but for the taking of the city of Rome at the same time by the Gauls." This taking of the city of Rome by the Gauls "took place when Pyrrhion was archon at Athens, in the first year of the ninety-eighth Olympiad," and Dionysius, the Greek historian, asseverates that there was no debate as to the year of the invasion of the Gauls. And to make it surely understood that the capture of Rome did not occur at the extreme end of this Olympiad year and consequently beyond the bounds of the Roman year 365, the Praenestine calendar supplies the precise date of the Battle of Allia, July seventeenth. If, then, the battle of Allia was fought on the only seventeenth of July that can be coincident with any day of the first year of the ninety-eighth Olympiad, then the disastrous fight was lost by the Romans on the seventeenth of July, A. U. C. 365, which coincided at that time, either nearly or to a negligible extent, with the seventeenth of July of J. P. 4326 or 388 B. C. But if the Roman year A. U. C. 365 is correctly placed parallel with both Olympiad ninety-eight, year one, and J. P. 4326 or 388 B. C., it is correctly adjudged by the Capitoline Marbles, and in agreement with that adjudication, correctly emplaced.

The next instance of computing the years of Rome according to the Capitoline count (which we would like to see demonstrated as such), is not a single one-year consulship, but a series of six consular administrations. It is the clumplike group of six consecutive consulates located at the threshold of the first Punic War. It is composed of the following consular terms:

<i>A.U.C.</i>	<i>Olymp.</i>	<i>Consuls.</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>
485	128 ¹	P. Sempronius Sophus; Ap. Claudius Rufus	480	4446 268
486	128 ²	M. Atilius Regulus; L. Julius Libo	481	4447 267
487	128 ³	N. Fabius Pictor; D. Junius Pera	482	4448 266
488	128 ⁴	Q. Fabius Max Gurges III; L. Mamilius Vitulus	483	4449 265
489	129 ¹	Ap. Claudius Caudex ; M. Fulvius Flaccus	484	4450 264
490	129 ³	M'. Valerius Maximus; M'. Octacilius Crassus	485	4451 263

As will be observed, every one of these terms is expressly connoted in Roman numerals in terms expressive of the then-legitimated count of the years of Rome. In A. U. C. 486, the consul of the preceding year 485, Ap. Claudius, triumphed over the Peicentes. In 487, M. Atilius, the consul of 486, celebrated a triumph over the Salentineans. In 488, N. Fabius Pictor, consul for the second time in the foregoing year 487, was granted a triumph over the Sallentineans and Messapicans. In 489, the consulship of Ap. Claudius (Caudex) and M. Fulvius Flaccus, the same year in which the first Punic War broke out, the consul of that same year (489), M. Fulvius Flaccus, was honored with a triumph over the Vulsinians, while in the year 490, the consul incumbent for that term, was given triumphal honors before that year was out, on XVI. K. April. [or March seventeenth], over the Poeneans and Hiero, the king of Sicily. Now, as may have been observed, the consulship of Ap. Claudius was connoted not only as the 489th year A. U. C., when his colleague, M. Fulvius Flaccus, was granted a triumph on the kalends of November, but also as the notable year when the first Punic war broke out and brought on a period of hostility lasting twenty-four years. But this beginning of the war is laid by Greek historians in the first year of the 129th Olympiad, when Diognetus, of the tribe of Leontis, was archon at Athens. The erudite author of the *Fasti Hellenici* (Vol. III, p. 11), Hy. Fynes Clinton, locates the archonship of Diognetus thus: "Diognetus was ninety-three years after Agathocles B. C. 357 (Ep. 77), 104 after Nausigenes B. C. 368 (Ep. 75), 107 after Phrasiclides B. C. 371 (Ep. 73), 116 after Pytheas B. C. 380 (Ep. 70), 144 after Euctemon B. C. 408 (Ep. 63). These coincidences fix Diognetus to B. C. 364-3." This archonship being thus definitely attached to the first year of the 129th Olympiad (the calculations of Boeckh being confirmed by the new fragment of the Parian Chronicle, see Ferguson's *Athenian Archons*, p. 29), it is evident that the outbreak of the first Punic war occurred sometime between the first of July and the kalends of November, 264 B. C. But if the war broke out in this summer or fall of 264 B. C., then it burst into flame in the 489th year from the

foundation of the City, which era, in that case, began its course in $[489+263=]$ 752 B. C.

The second instance of the years A. U. C., which we wish to verify by a comparison with another standard of time-measurement, is the year 525. This year was chiefly remarkable for the mission of the first Roman embassy to Greece. On the Roman side of this international contact the event was dated in the consulship of Sp. Carvilius Maximus II. and Q. Fabius Maximus Verrucosus II. During the course of this consulship, on the tenth of the kalends of Quintilis (or July) of this the 525th year A. U. C., the consul of the preceding term of office celebrated a triumph for his success in Illyria, and so supplied this year with a date in terms of the Capitoline computation. In the early part of the Roman year this doubly identified, the first embassy dispatched by the Roman republic to Greece repaired to that country in time to attend the Isthmian Games, as the Olympian contests are here designated. The description of the date on the Greek side of this convention is the first year of the 138th Olympiad. As the ambassadors departed from Rome in the spring of the consular term of office and at the very commencement April twenty-first of the serial year A. U. C. 525, and whereas the embassy arrived in Greece *before* the beginning of the 138th Olympiad, it follows that the Roman representatives were on their way to Greece in the same vernal season which was common to all the connotations of time just mentioned; to wit, the Olympiad year preceding the stadium year of the 138th contest, the consular year of the two Maximi II, and the 525th year of the series of Roman years known as the Capitoline computation. Consequently the present year 525 A. U. C. is correctly emplaced in correspondence with Olymp. 138¹ in the 4486th year of the Julian Period and the 228th year of Common B. C.

The third instance of direct identification of a Roman year dated A. U. C. in terms of the Capitoline count by means of the Greek series of Olympic games is the year 581. This year can be easily shown to synchronize with the first year of the 152nd Olympiad, but, owing to the fragmentary state of the Capitoline Marbles at this point, we prefer to pass by this case solely because of the incompleteness of the historical information connected with it in the tables.

The next direct corroboration of a date expressly couched in terms of the Capitoline count by the evidence of another well-authenticated era may be observed in the years 585 and 586 A. U. C. We combine these two adjacent years because the former is not expressly mentioned in the Marbles, but the latter is, and that three times. Three generals, returning home victorious from the wars assigned to them, were granted triumphal

honors in the city of Rome in the year of the city 586. The year so profusely distinguished was the consulate of Q. Aelius Paetus and M. Junius Pennus, following in immediate sequence to the consulship of L. Aemilius Paullus II. and C. Licinius Crassus. The triumphs celebrated in this consular year designated expressly the 586th in the Capitoline Tables were decreed in honor of Aemilius Paullus for his success in Macedonia, of C. Octavius for his success in the war with Perseus, and of Anicius Gallus for his successful campaign against king Gentius and the Illyrians. The good fortune of the first of these three victors is the one of greatest distinction, not only because of its cosmopolitan importance, but because of the chronological support it receives and the confirmation it in turn can give. Being duly observed in the year succeeding the occasion it was to honor, the triumph of Aemilius Paullus emphasizes the victory its recipient won on the field of Pydna the day after the darkening of the moon which cost king Perseus his crown and kingdom. That eclipse of the moon had occurred in his own consulship, that of Aemilius Paullus II and C. Licinius Crassus, consequently in the year A. U. C. 585 of the Capitoline Tables, and yet had been recorded by Porphyry as having happened in the fourth year of the 152nd Olympiad, in advance of the archonship of Xenocles, in which the king was captured, a month or so later. (See papyrus rolls from Herculaneum quoted by Dumont, *Fast. Epon, d'Athens*, p. 18, and Ferguson, *Athen. Secr.*, pp. 60–61). But both these dates, in Roman and Grecian dress, are equivalent to the year of the Julian Period 4546 and of the common Christian Era 168 B. C. Therefore they both stand in a mutually sustaining relation to each other, the Roman year 585 A. U. C. supporting Olympiad 152⁴, and the Greek Olympiad 152⁴ upholding the Capitoline computation 585 A. U. C.

The next instance of dating an event in the phrase and figures of the Capitoline Marbles will be found to differ from the foregoing in that it leans for support on the well-authenticated era of Nabonassar and the no less well-established calendar-cycle known as the Calippic Period, instead of the plain seriation of Olympiadic years. Whatever event occasioned the third observation of the autumnal equinox by Hipparchus of Alexandria, the time of its being done was recorded as occurring on the first of the complementary days known as the epagomenae in the Nabonassan year 590, and in the twenty-first year of the third Calippic Period. The Nabonassan year 590 is unalterably fixed at J. P. 4556 or 158 B. C., or, to be more precise, from the second of October 159 B. C. to the first of October 158 B. C. The twenty-first year of the third Calippic Period is coextensive with the Olympiadic year 619, being the third year of the 155th Olympiad. But the

tenth year after the close of the 152nd Olympiad (when the battle of Pydna was fought, in the consulship of Aemilius Paullus), is the consulship of M. Aemilius Lepidus and C. Popillius Laenas II., which is connoted as the 595th year A. U. C., according to the Fasti Capitolini. That this Capitoline connotation agrees with the 590th year of the Nabonassan Era and the 619th Olympiad year, which is identical with the twenty-first year of the third Calippic Period, may be readily seen from this diagram:

<i>A.U.C.</i>	<i>Cal. P.</i>	<i>Olym.</i>	<i>Consuls</i>	<i>Nab</i>	<i>J.P. or B.C.</i>
585	III. 11	153 ¹	L. Aemilius Paullus II; C. Licinius Crassus	580	4546 16
586	III. 12	153 ²	Q. Aelius Paetus; M. Junius Pennus	581	4547 16
587	III. 13	153 ³	C. Sulpicius Gallus; M. Claudius Marcellus	582	4548 16
588	III. 14	153 ⁴	T. Manlius Torquatus; Cn. Octavius	583	4549 16
589	III. 15	154 ¹	A. Manlius Torquatus; Q. Cassius Longinus	584	4550 16
590	III. 16	154 ²	Ti. Sempronius Gracchus II.; M. Juventius Thalna	585	4551 16
591	III. 17	154 ³	P. Cornelius Scipio Nasica; C. Marcus Figulus	586	4552 16
592	III. 18	154 ⁴	M. Valerius Messala; C. Fannius Strabo	587	4553 16
593	III. 19	155 ¹	L. Anicius Gallus; M. Cornelius Cethegus	588	4554 16
594	III. 20	Cn. Cornelius Dolabella; M. Fulvius Nobilior		589	4555 15
595	III. 21		Cn. Aemilius Lepidus; C. Popillius Laenas II.	590	4556 15

But if the first of the epagomenae of Nab. 590 and of Cal. P. III. 21 is the same day as September twenty-seventh, 158 B. C., then it is also, or approximately so, the twenty-seventh of September of 595 A. U. C., and the Capitoline computation of this date is correct.

The next following example of Capitoline computation is again reinforced by the reckoning in Olympiad years. The date in question refers to the consulship of M. Plautius Hypsaeus and M. Fulvius Flaccus at Rome and the archonship of Jason, of the tribe of Hippothontis, at Athens. That the Roman consulship pertained to the year A. U. C. 628 according to the Capitoline Marbles, may be deduced from a brief survey of preceding consulates.

<i>A.U.C.</i>	<i>Olymp.</i>	<i>Consuls.</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>
624	162 ⁴	C. Sempronius; M'. Aquillius	619	4585 129
625	163 ¹	Cn. Octavius; T. Annius Rufus	620	4586 128
626	163 ²	L. Cassius Longinus; L. Cornelius Cinna	621	4587 127
627	163 ³	M. Aemilius Lepidus; L. Aurelius Orestus	622	4588 126
628	163 ⁴	M. Plautius Hypsaeus; M. Fulvius Flaccus	623	4589 125

That Jason, of the tribe of Hippothontis, was archon at Athens at the same time when Plautius Hypsaeus and Fulvius Flaccus were consuls at Rome is positively known from a statement to that effect by Phlegon of Tralles (see Ferguson's *Athenian Secretaries*, p. 61). And that the specific year of Jason's archonship was the fourth year of the 163rd Olympiad is ascertained from the regular order and rotation of the tribe which furnished the secretary of the senate and people. If, then, according to the reading of the Capitoline Tables, the triumph of M'. Aquillius was celebrated on the III. Idus Novembr. (November eleventh) A. U. C. 627, (which is the year preceding the consulship of Plautius Hypsaeus and Fulvius Flaccus), then 628 is the correct Capitoline year of the era of Rome, correctly emplaced on the Scale of Time as synchronous with the fourth year of the 163rd Olympiad and the 125th year of the common Christian Era, B. C.

In order to be able to verify the next instance of Capitoline computation with satisfaction as well as facility, let us visualize the seriation of the six consular terms from A. U. C. 655 to 660. The six consulships alluded to, with their unalterable dates, are these:

A. U. C. Olymp.		Consuls.	Nab.	J. P. or B. C.	
655	170 ³	Q. Caecilius Metellus Nepos; T. Didius	650	4616	98
656	170 ⁴	Cn. Cornelius Lentulus; P. Licinius Crassus	651	4617	97
657	171 ¹	Cn. Domit. Ahenobarbus; C. Cassius Longinus	652	4618	96
658	171 ²	L. Licinius Crassus; Q. Mucius Scaevula	653	4619	95
659	171 ³	C. Coelius Caldus; L. Domit. Ahenobarbus	654	4620	94
660	171 ⁴	C. Valerius Flaccus; M. Herennius	655	4621	93

Of these six consulates the first and the last terms are distinguished by a connotation of the Capitoline count, 655 and 660 respectively, while the second term, corresponding to 656, is starred by a comparison with the Olympiadic year known as the second archonship of Argeios, the third year of the 170th Olympiad. The tangency of the Roman consulship with the archonship of Argeios II is attested in the Delian inscription referred to by Ferguson (*Athenian Secretaries*, p. 61); and that this second archonship of Argeios is assigned to its proper place in the scale of Olympic years, is assured by the secretaryship, whose turn it was to function in that year (required by the tribe Erechtheis), the fourth year of the 170th Olympiad, or 97-96 B. C. In regard to the cogency of this identification, Ferguson has this to say:

"The coincidence between the tribe postulated for the secretary by the unbroken continuation of the official order [from 304-3 B. C. to date 97-6 B. C.], and the tribe which the inscriptions show to have held the secretaryship, in any one of the

four years [to wit, (1) 268-7 B. C.; (2) 168-7 B. C.; (3) 125-4 B. C. (4) 97-6 B. C.], would alone be sufficient, in the absence of evidence to the contrary, to make the unbroken continuation of the official order all but certain. *No uncertainty whatever remains when all four are considered together*; for, although there might be a difference of opinion as to whether Xenokles, Jason, and the second Argeios belonged to the years 168-7 B. C., 125-4 B. C., and 97-6 B. C., or to 167-6 B. C., 126-5 B. C. [124-3 B. C.], and 96-5 B. C., respectively, yet, when we string the three years on the official order of their tribes (which official order groups VII, VIII, IX, and X given above demonstrate), the intervals between the figures of each set of years make the former set alone possible. For instance, *if Jason were put in 126-5 B. C., as Baiter supposed, Xenokles would have to be put in 169-8 B. C.* But in Xenokles' archonship, Perseus king of Macedon was made prisoner by the Romans, an event which did not take place till after the battle of Pydna in the early part of the Attic year 168-7 B. C. Xenokles, therefore, could not have belonged to the year 169-8 B. C., nor Jason to the year 126-5 B. C."

Agreeing with the author of this very learned treatise on the validity of the interrelations of the three dates mentioned, we cannot take exception to the correctness of the dates themselves. The correlation of all three instances is made dependent on the theory that Perseus, the king of Macedonia, was captured quite shortly after his defeat in the battle of Pydna, that is to say, soon enough after that event to place the defeat in one Olympiad year [169-8 B. C.] and the capture in another [168-7 B. C.]. Now "the battle of Pydna was fought on the Roman fourth of September, or on the twenty-second of June of the Julian calendar, in the year 168 B.C." (Mommson, *History of Rome*, Vol. II, p. 355), and (as the author here correctly adds) "*Perseus was captured a short time afterwards.*" This capture of the king is expressly said to have occurred in the archonship of Xenokles, representing the second tribe in the official order, Aigeis. The "short time" which elapsed before the king was caught may well have intervened between the battle on the twenty-second day of June and the capture before the summer solstice, when a new Olympiad year and a new Athenian archonship would commence. So if the capture of king Perseus antedated the beginning of the succeeding Attic year, and the time of capture was not the Olympiad year of the battle of Pydna, viz. the fourth year of the 152nd Olympiad, then the following Attic year, the first year of the 153rd Olympiad was the archonship of Xenokles, and that corresponded to 168-7 B. C.

But if, according to Porphyry, the battle of Pydna was fought in the fourth year of Olympiad 152 [169-8 B. C.] or the 608th

Olympiadic year, and this Attic twelve-month was followed by the archonship of Xenokles, i.e. 168–167 B. C., and, on the other hand, the first consulship of Julius Caesar (in 58–57 B. C.) terminated in the archonship of Herodes, of the Athenian tribe Leontes, in the third year of the 180th Olympiad, which 719th Olympiadic year was the fourth secretarial year in the order of the twelve tribes; then a consistent regimentation of Olympiads and archonships will inevitably and unalterably produce the result that the cycle of twelve tribes immediately preceding that which included the first consulship of Caesar came to its close in the summer of 61 B. C., and the cycle preceding that which witnessed the battle of Pydna terminated in the summer of 169 B. C. The consequence is that the then acting archon at Athens, Xenokles, representing the second tribe Aigeis, must be conceived in office in the first year of Olympiad 153 or 168–167 B. C.; Jason, of the ninth tribe Hippothontis in the fourth year of the 163rd Olympiad or 125–124 B. C.; Argeios, of the first tribe Erechtheis in the fourth year of Olympiad 170 or 97–96 B. C.; and Herodes, representing the fourth tribe Leontes, in the third year of Olympiad 180 or 58–57 B. C. There having been nine complete revolutions of the tribal cycle of twelve years and twenty-seven complete Olympic periods of four years each, there can have been, in these 108 years, neither surplus nor deficit, either in the count of eponymous terms of office at Athens, or in the consular list of offices at Rome.

There remains, then, only to draw the logical conclusion. If the consulship of Cn. Cornelius Lentulus and P. Licinius Crassus coincided in part, viz. in its first part with the second archonship of Argeios in the fourth year of the 170th Olympiad, then this consulship, succeeding that of Q. Caecilius Metellus Nepos and T. Didius in A. U. C. 655 (Cap.) immediately without any intervention whatever, must have been indeed the 656th year from the building of Rome according to the Capitoline computation, which therefore was still in vogue and correctly kept in 96 B. C.

Another consular term, as we believe, of Capitoline character, but without a Capitoline connotation in so many figures, is given very explicitly by Josephus, the Jewish historian (in his *Antiquities*, B. XIV. C. I. §2).

Speaking of the change of government on the death of Queen Alexandra, and the accession of her sons, Aristobulus to kingship and John Hyrcanus to the priesthood, he relates: "Hyrcanus then began his high-priesthood on the *third year of the hundred and seventy-seventh Olympiad*, when *Quintus Hortensius and Quintus Metellus*, who was called Metellus of Crete, were consuls at Rome." This would, if consistently counted, be the 684th

year A. U. C. according to the Capitoline computation, but, being not expressly so engraved in the Marbles, we shall pass on to another date.

Another date, of similar character and by the same author, is the description of the year in which, among other great events, the capture of Jerusalem by Pompey is mentioned: "The city was taken," says Josephus (*Antiq. B. XIV. C. IV. §3*), "on the third month, on the day of the fast, *upon the hundred and seventy-ninth Olympiad, when Caius Antonius and Marcus Tullius Cicero were consuls.*" Now, if we assume that, by "the 179th Olympiad," Josephus meant its stadium year, and not its second year, and that, by the consulship of Cicero and Antony, he meant the period of the consular term as it actually happened, not as it should have done; then the City must have been taken before the Summer Solstice of 63 B. C., and cannot have been captured as late as the Fast in the *ninth* Hebrew month Casleu, as Reimar, Usher, and Clinton insist, without vitiating and wiping out the entire date as given by Josephus. For if it is true that the Roman calendar, at this time, (63 B. C.), had lapsed forward 101 days, the consular term of Cicero and Antony expired on the [365—101=] 264th day of a regular Julian year, in other words, on the twentieth of September, J. P. 4651 or 63 B. C. But if we cannot thus summarily set aside the description of Josephus, either in its first or its second part, then we must take for granted that Jerusalem was captured in the early summer or spring of 63 B. C., or that part of the warm season of that year which was common to the consulship of Cicero and the 713th Olympiadic year, coming to a close with the Summer Solstice of 63 B. C. The succeeding consulship of D. Junius Silanus and L. Licinius Murema being coincident in part, but not conterminous, with the Julian year 4652 or 62 B. C.; and that of M. Pupius Piso Calpurnianus and M. Valerius Messala with that of J. P. 4653 or 61 B. C., when, on two successive days, the twenty-ninth and the thirtieth of September, the world conqueror, Pompey the Great, celebrated his triumphs over Africa, Europe, and Asia, in the expressly designated year of Rome 692 according to the Capitoline fragments; it follows that the immediately preceding year was 691, and, by the same token, the year before that, as truly 690 A. U. C. according to the Capitoline computation. Hence we might as well say that Jerusalem was taken by Pompey in the Roman year A. U. C. 690 (Cap.), "when Cicero and Antony were consuls at Rome," for that coincided with the first year of the 179th Olympiad." And we see from this that the Capitoline computation, up to date (although on the verge of being displaced by the Varronian), was still in official vogue, in public favor, and in consistent conventional use. It was continued and kept up for

some time longer, for we find the following years given specific, distinguished attention: 707, 708, 709, 715, 717, 719, 725, 726, 727, 732, and 734. We even find the Capitoline computation revived after a long interval in the dates 789, 803, and 819 of Frontinus (*De Aquae Ductibus Urbis Romae*), but it is gradually, at first, then completely superseded and supplanted by the un-historic system of Terrentius Varro. By the prestige and influence of such friends as Pompey and Cicero, and by the overshadowing patronage of the later Roman emperors, the system of Varro was pushed to the front, and the old historic and official count was crowded to the rear. We are therefore necessarily obliged to treat the following period from 63 B. C. to 70 A. D. in a manner entirely different from the one so far pursued.

Much in the vein of Dr. Brookes, who, writing an introduction to Mr. Page's book *New Light from Old Eclipses*, says: "It will be difficult to detect any fallacy in the author's reasoning, or to escape the force of his arguments," the great Roman orator, M. Tullius Cicero, is carried off his feet by his ill-founded enthusiasm of M. Terrentius Varro and his work, and indulges in the following oratorical flight, as repeated and approved by Dr. Jarvis (*Chron. Intr.*, p. 36).

"We were like travellers and strangers in our own city," he apostrophizes Varro, "when your books brought us home, as it were, and showed us our place and origin. You have disclosed to us the age of our country, the arrangement of times, the laws of our religion and priesthood, civil and military discipline, the position of places and countries, the names, the classifications, the operations, and the causes of all things, divine and human; you have shed the greatest light upon our poets, and upon Latin literature in general."

And joining in the applause of the spouting orator, Dr. Jarvis continues: "Relying on the computation of such an author, Censorinus [the grammarian] informs us, that the year in which he wrote, that is, the consulship of Ulpian and Pontianus [238 A. D.], was

"First, . . . the thousand and fourteenth year from the first Olympiad of Iphritus; in other words, the second year of the 254th Olympiad.

Secondly, reckoning from the Parilia, or the twenty-first of April, it was the 991st year of Rome." Etcetera, etcetera.

Excluding, as irrelevant for a moment, the computation by Olympiads from the present consideration, let us observe that the count of 991 years A. U. C. conflicts with the Capitoline count which enumerates only 990 years. When we consider, furthermore, that the count 841 A. U. C. by Censorinus and Suetonius is as firmly intrenched as any Capitoline date, to the

Julian year 4801 or 88 A. D.; that the count 800 A. U. C., authenticated by Tacitus, as equivalent to J. P. 4760 or 47 A. D., is equally firm; that 783, the starting-point of Velleius Paterculus in all his historical calculations, is immovably based on the bed-rock of J. P. 4743 or 30 A. D.; that the count 767 A. U. C. by Orosius for the death-year of Augustus Caesar is unalterably linked with the 761st year of Nabonassar, the second year of the 198th Olympiad, the 325th year of the Seleucidae, and also to the 4727th year of the Julian Period or the fourteenth year of the common Christian Era; finally, when we reflect that the Varonian reckoning protrudes even beyond 737, the date of the Secular games by Censorinus, being projected into the past as far back as 607 A. U. C. for the destruction of Carthage and Corinth, while the Capitoline computation extends into the future, so that sometimes this and sometimes that mode of reckoning was in the ascendancy, it is obvious that there was a clash and a crash along chronological lines somewhere in this vicinity. Where the first collision occurred, it is impossible to say. The fact seems to be that the transition from the old historical count to the new hypothetical computation did not take place in the twinkle of an eye, but transpired in the evolution of a century, that is to say, during the turbulent period between 63 B. C., when Pompey first triumphed over the whole then-known world, and 87 A. D., when the Secular Games were about to be celebrated by Domitian. The competition between the two counts terminated in the triumph of the imperialistic over the republican: the count of the dictatorial prevailed over that of the proletarian.

However, the truth of history is not impaired by the method of chronology, provided the process of computation is kept well in hand. As chronologists we take note of the facts and mark the extent of error, and then proceed to compute the time. With a view to bridging the gap and eliminating the possibility of blunder through lapse or duplication, we shall now go on to the next line of time-determination to be used in our endeavor to get at the facts and figures regarding the death of Jesus Christ and the consequent date of the next ensuing Easter, which, of course, would be the Sunday following the day of crucifixion.

VOLUME II. CHAPTER I

THE SUCCESSION OF ROMAN CONSULS

As in the case of the Olympiads with their subsidiary list of Athenian archons, so the series of Roman consuls with the count of years *ab urbe condita* (A. U. C.) may be fastened on the world's true record of time by means of that well-authenticated epoch, the Nabonassan Era and the *Astronomical Canon*. True, the Egyptian Era and *Canon* do not intervene between the early succession of consuls during the time of the republic and the earliest section of the Olympic Scale or even of the Julian Period. We find no points of contact before the advent of Romans in the land of Egypt. But we meet with them about the time which marks the beginning of our especially allotted inquiry, the times of the Macedonian-Roman influence over Egypt, which include the times of the Asmonean-Herodian power over Judea, which again include the life and times of Jesus the Messiah. Once we have fixed the beginning of the period we have staked off as the province of our chronological investigations; namely, the date of the battle of Pydna referred to in 1 Macc. 8:5; and bolstered up this section of time, at least at the three points of contact where all three of these great eras abut against one another; we shall soon (in less than half a hundred years) come across the *Astronomical Canon* in the accession of Cleopatra to the throne of Egypt, and, closing with her regime, the fourth quarter of Daniel's vision representing the thralldom of the Greeks and Macedonians over Egypt, we come to the iron dominion of the Roman emperors whose crushing, rigorous reigns will by their duration dictate the number and determine the location of the consulates. As we come down the long line of consular term notations, we shall be profoundly convinced that this imposing catalogue is, not indeed, as Epiphanius calls it, "an infallible succession of consuls," but a very satisfactory, dependable series of annual officials and the official annals that go with them. As we proceed from contact to contact, filling in the interstices with contiguous and conterminous matters of fact, we shall be surely grounded and fairly intrenched in a chronological territory until now engulfed in chaotic confusion without parallel. Out of the mass of conflicting and contradictory theories regarding the reckoning of years from the foundation of Rome, we shall select that enumeration of consulates which shall most freely and un-

forcibly conform to the facts already established by the previous eras. We shall not agree with Dr. Jarvis, who asserts that "the supposed discrepancy of one year, between the computations of Varro and the *Fasti Capitolini*, and other public records of the Roman government, has been shown not to exist," nor with Fynes Clinton (III, p. 4), who expresses the fear that "the Capitoline Marbles might have followed a different computation from that of Censorinus," although he elsewhere states expressly that "the Capitoline Marbles are everywhere one year behind the date of Varro," and this discrepancy he stresses on every page of his book. We shall see the correct succession of consuls emerge from the flood like mountain islands from the deep blue sea. But before we can build our faith on these solid rocks of chronology, it is incumbent on us to verify and test these consulships, section by section, as we go along. We shall do this by dividing and subdividing these registers, under the empire, according to the reigns of the respective emperors, and under the republican form of government, according to the obvious points of opposition provided by the events of history.

Victorious by the superior fitness of the Roman legion over the Macedonian phalanx as well as by the fateful influence of the eclipse of the moon on the eve of the battle of Pydna, Aemilius Paullus achieved his success in the consular term of office which had been dedicated to himself, L. Aemilius Paullus, and C. Licinius Crassus, contemporary by half, or in part at least, with the archonship of Xenocles at Athens, and coincident in part with the thirteenth canonical year of king Ptolemy Philometor of Egypt. The latter fact is not, indeed, expressly mentioned in any record of the times, but the embassy of Gaius Popilius to Alexandria in aid of the king of Egypt against Antiochus, king of Syria, occurred in this same consulate and brought about the sensational spectacle of a civilian issuing orders to a king. The king, having decided, within the radius of the circle drawn around him by the civilian's staff, to withdraw from Alexandria, turned aside from his homeward march to wreak his wrath on the unhellenized city of Jerusalem. The devastation he wrought in the holy city occurred, as everyone knows, in the 145th year of the kingdom of the Greeks (or Seleucidae), after the fourth expedition of Antiochus had thus been thwarted by the republican ambassador of Rome in Egypt, shortly after the then-known world had been electrified by the news of the almost unbelievable triumph of Roman arms over the Greek. As this marvel of Roman strategy happened two years after the second expedition of the Syrian against the Egyptian king in Sel. 143, which is specifically noted as coincident with Nab. 578 and the eleventh canonical year of Ptolemy Philometor, it follows that the fourth

expedition, two years later, occurred in Nab. 580 and the thirteenth year of Philometor, which corresponded in the main with 168 B. C. or J. P. 4546. Thus all major eras and epochs of history unite in riveting the consulate of Aemilius Paullus and Licinius Crassus to 168 B. C., rendering it labor lost to attempt such a thing as moving this pivotal and epochal consulship either one year higher up or two years lower down, as suggested by the anachronistic and metachronistic schools of chronology.

From a rigid application of a solid block of eighteen Olympiads reinforced by six sets of twelve tribal secretaries and archons at Athens, we may derive the well-founded conclusion that, if the first Roman consulate impinged upon by the Greek line of Olympiadic years and by the list of Athenian archonships was the consulship of Aemilius Paullus and Licinius Crassus, enumerated officially on the Capitoline Marbles as the 585th year A. U. C. (seeing that the consulate of M. Aemilius Lepidus and C. Popilius Laenas II, ten years later was the 595th), then the consulate of M. Plautius Hypsaesus and M. Fulvius Flaccus, which corresponded with the latter half of the archonship of Jason of Athens in the fourth year of the 163rd Olympiad, was the 628th year from the foundation of Rome. It was this also because the one before, the consulship of M. Aemilius Lepidus and L. Aurelius Orestes (in 126 B. C.), is officially enumerated as the 627th, and the consulship of Q. Caecilius Metellus and T. Quinctius Flaminius two years later (in 123 B. C.) is numbered as the 630th. If, then, we fill in this interval between 168 B. C. and 125 B. C. consistently with the series of numbers thus indicated, we shall have the following consulships either expressly numbered or have their number logically implied. (We give the express enumeration in boldface):

<i>A. U. C. Olymp.</i>		<i>Consuls.</i>	<i>Nab.</i>	<i>J. P. or B. C.</i>	
585	153 ¹	L. Aemilius Paullus ; C. Licinius Crassus	580	4546	168
586	153 ²	Q. Aelius Paetus; M. Junius Pennus	581	4547	167
587	153 ³	C. Sulpicius Gallus; M. Claudius Marcellus	582	4548	166
588	153 ⁴	T. Manlius Torquatus ; Cn. Octavius	583	4549	165
589	154 ¹	A. Manlius Torquatus; Q. Cassius Longinus	584	4550	164
590	154 ²	Ti. Sempronius Gracchus II; M'. Juven- tius Thalma	585	4551	163
591	154 ³	P. Cornelius Scipio Nasica; C. Marcius Figulus	586	4552	162
592	154 ⁴	M. Valerius Messala; C. Fannius Strabo	587	4553	161
593	155 ¹	L. Anicius Gallus; M. Cornelius Cethegus	588	4554	160
594	155 ²	Cn. Cornelius Dolabella; M. Fulvius Nobilior	589	4555	159
595	155 ³	M. Aemilius Lepidus; C. Popillius Laenas II.	590	4556	158
596	155 ⁴	Sex. Julius Caesar; L. Aurelius Orestes	591	4557	157
597	156 ¹	L. Cornelius Lentulus; C. Marcius Figulus II.	592	4558	156

<i>A.U.C. Olymp.</i>		<i>Consuls</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>
598	156 ²	P. Cornelius Scipio Nasica II; M. Claudius Marcellus II.	593	4559 155
599	156 ³	Q. Opimius; L. Postumius Albinus	594	4560 154
600	156 ⁴	Q. Fulvius Nobilior; T. Annius Luscus	595	4561 153
601	157 ¹	M. Claudius Marcellus III.; L. Valerius Flaccus	596	4562 152
602	157 ²	L. Licinius Lucullus; A. Postumius Albinus	597	4563 151
603	157 ³	T. Quinctius Flaminius; M'. Acilius Balbus	598	4564 150
604	157 ⁴	L. Marcus Censorinus; M'. Manilius	599	4565 149
605	158 ¹	Sp. Postumius Albinus Magnus; L. Calpurnius Piso Caeson	600	4566 148
606	158 ²	P. Cornel Scipio Afric. Aemillonus; C. Livius Drusus	601	4567 147
607	158 ³	Cn. Cornelius Lentulus; L. Mummius	602	4568 146
608	158 ⁴	Q. Fabius Maximus Aem.; L. Hostilius Mancinus	603	4569 145
609	159 ¹	Ser. Sulpicius Galba; Aurelius Cotta	604	4570 144
610	159 ²	Ap. Claudius Pulcher; Q. Caecilius Metellus Mae.	605	4571 143
611	159 ³	L. Caecil Metellus Calvus; Q. Fabius Max Servilianus	606	4572 142
612	159 ⁴	Cn. Servilius Caepio; Q. Pompeius Rufus	607	4573 141
613	160 ¹	C. Laelius Sapiens; Q. Servilius Caepio	608	4574 140
614	160 ²	Cn. Calpurnius Piso; M. Popillius Laenas	609	4575 139
615	160 ³	P. Cornelius Scipio Nasica; D. Junius Brutus	610	4576 138
616	160 ⁴	M. Aemilius Lepidus Porcina; C. Hostilius Mancinus	611	4577 137
617	161 ¹	Lucius Philus; Sex. Atilius Serranus	612	4578 136
618	161 ²	Ser. Fulvius Flaccus; Q. Calpurnius Piso	613	4579 135
619	161 ³	P. Corn. Scipio Afr. Aem. II; C. Fulvius Flaccus	614	4580 134
620	161 ⁴	P. Mucius Scaevola; L. Calpurnius Piso Frugi	615	4581 133
621	162 ¹	P. Popillius Laenas; P. Rupilius	616	4582 132
622	162 ²	P. Licinius Crassus Mucianus; L. Valerius Flaccus	617	4583 131
623	162 ³	C. Claudius Pulcher; M. Perperna	618	4584 130
624	162 ⁴	C. Sempronius Tuditanus; M'. Aquilius	619	4585 129
625	163 ¹	Cn. Octavius; T. Annius Rufus	620	4586 128
626	163 ²	L. Cassius Longinus; L. Cornelius Cinna	621	4587 127
627	163 ³	M. Aemilius Lepidus; L. Aurelius Orestes	622	4588 126
628	163 ⁴	M. Plautius Hypsaeus; M. Fulvius Flaccus	623	4589 125

At this the second outstanding point of contact of the two great similar systems of time-reckoning, the Roman consulates and the Athenian archonships in conjunction with the Olympic games, it may be well to add, by way of complement, that this consulate of M. Plautius Hypsaeus and M. Fulvius Flaccus is still further bound up with this cluster of dates by a reference to the censorship of Cn. Servilius Caepio and L. Cassius Longinus,

which functioned with undue severity in the course of this consulate. Velleius Paterculus corroborates the facts and figures in his *Compendium of Roman History* thus: "Let us here record a severe act of the censors Cassius Longinus and Caepio, who, a hundred and fifty-five years ago, summoned before them an augur, Aemilius Lepidus, because he rented a house at six sester tia." (B. II. c. x). One hundred and fifty-five years before the standpoint of the writer (783 A. U. C.) places the censorship of Cassius Longinus and Caepio in the year 628, and Frontinus (*de Aquaed.* C. 8) vouches for the fact that these over-severe censors were created such in the consulate of Hypsaeus and Flaccus. Consequently this consulate is correctly placed, not only as now pointed out in the year of Rome 628 according to the official Capitoline count, but, as otherwise stated, in the third to fourth year of the 163^d Olympiad, in correspondence with the archonship of Jason at Athens, and in rapport with the Julian year 4589 or 125 B. C.

The third approximation to a united and co-ordinated testimony of two or more great eras to a certain date within the compass of our inquiry comprises the next thirteen years, from 629 to 641 A. U. C., which, though not expressly enumerated, are nevertheless implied by the Olympiads 164 to 167¹, and the series of Athenian archons of the tenth tribe (Aiantis) to again the tenth (Aiantis). The succession of consuls (between Jason and Dionysius) as given by the Capitoline Marbles are as follows:

A. U. C. Olymp.		Consuls.	Nab.	J. P. or B. C.	
629	164 ¹	C. Cassius Longinus; C. Sextius Calvinus	624	4590	124
630	164 ²	Q. Caecilius Metellus; T. Quinctius Flamininus	625	4591	123
631	164 ³	Cn. Domit. Ahenobarbus; C. Fannius Strabo	626	4592	122
632	164 ⁴	Q. Fabius Maximus; L. Opimius	627	4593	121
633	165 ¹	P. Manlius; C. Papirius Carbo	628	4594	120
634	165 ²	L. Caecilius Metellus; L. Aurelius Cotta	629	4595	119
635	165 ³	M. Porcius Cato; Q. Marcius Rex	630	4596	118
636	165 ⁴	L. Caecilius Metellus; Q. Mucius Scaevola	631	4597	117
637	166 ¹	C. Licinius Geta; Q. Fabius Maximus	632	4598	116
638	166 ²	M. Aemilius Scaurus; M. Caecilius Metellus	633	4599	115
639	166 ³	M'. Acilius Balbus; C. Porcius Cato	634	4600	114
640	166 ⁴	C. Caecil. Metellus Caprarius; Cn. Papirius Carbo	635	4601	113
641	167 ¹	M. Livius Drusus; L. Calpurnius Piso	636	4602	112

The last-mentioned pair of consuls is coupled by an ancient record to the archonship of Dionysius, who served his term of office in the fourth year of the 166th Olympiad and by his tribal connection (Aiantis) is bound to the tenth place in the order of tribes (113-2 B. C. or 641 A. U. C.). While the second and the

sixth consulate are expressly numbered respectively the 630th and the 634th year from the foundation of the city by the Capitoline count, the fourth, that of Q. Fabius Maximus and L. Opimius, is assigned to this place by the computation of Paterculus (*C. R. H.*, B. II, c. VII), who says that between the consulate of Opimius and "yours, Marcus Vinicius, a hundred and fifty-one years have elapsed." Deducting 151 years from 783, the official term of Vinicius, the resulting year is 632 A. U. C. Consequently the consulship, too, of M. Livius Drusus and L. Calpurnius Piso, is correctly emplaced in the 641st year A. U. C. and in the fourth year of the 166th Olympiad, when terminating in the 4602nd year of the Julian Period, or 112 B. C.

The fourth approach to a complete verification of a date located in our chosen period by nearly all the great eras of antiquity is the fifteenth year after this; viz. the consulate of Cn. Cornelius Lentulus and P. Licinius Crassus. This epochal consulship, conspicuously noted by Pliny (*H. N.* xxx. 1) as the 657th year A. U. C. according to Varro, but more correctly and officially marked the 656th year according to the Capitoline Marbles, is linked with the archonship of Argeios of Athens, which administration itself was rated as the first year of a new revolution of the twelve secretarial tribes and began with the third year of the 170th Olympiad. The archonship of Argeios, therefore, in its second half, as well as the consulship of Lentulus and Crassus in its first half coincided with the Julian year J. P. 4617 or 97 B. C. and consistently closed the count of seventy-three years from the year preceding the battle of Pydna. This year is incidentally distinguished by a resolution of the senate and people of Rome that no human being should henceforth be immolated (or offered in sacrifice to the gods). The fifteen sets of consuls are as follows:

<i>A. U. C. Olymp.</i>		<i>Consuls.</i>	<i>Nab. J. P. or B. C.</i>		
642	167 ²	P. Cornel. Scipio Nasica; L. Calpurnius Bestia	637	4603	111
643	167 ³	M. Minucius Rufus; Sp. Posthumius Albinus	638	4604	110
644	167 ⁴	Q. Caecilius Metellus; M. Junius Silanus	639	4605	109
645	168 ¹	Ser. Sulpicius Galba; M. Aurelius Scaurus	640	4606	108
646	168 ²	L. Cassius Longinus; C. Marius	641	4607	107
647	168 ³	C. Atilius Serranus; Q. Servilius Caepio	642	4608	106
648	168 ⁴	P. Rutilius Rufus; C. Manilius	643	4609	105
649	169 ¹	C. Marius II.; C. Flavius Fimbria	644	4610	104
650	169 ²	C. Marius III.; L. Aurelius Orestes	645	4611	103
651	169 ³	C. Marius IV.; Q. Lutatius Catulus	646	4612	102
652	169 ⁴	C. Marius V.; M'. Aquillius	647	4613	101
653	170 ¹	C. Marius VI.; L. Valerius Flaccus	648	4614	100
654	170 ²	M. Antonius; A. Postumius Albinus	649	4615	99
655	170 ³	Q. Caecilius Metellus; T. Didius	650	4616	98
656	170 ⁴	Cn. Cornelius Lentulus; P. Licinius Crassus	651	4617	97

Now, while the year-number of the last-named consulate is not expressly engraved on the Capitoline Marbles, that of the foregoing one is. And while the year of Pompey's birth is not directly given by Paterculus (*C. R. H.*, B. II. c. xxix), he furnishes the figures by means of which that year may be established. He says: "Not long before Lucius Sylla's arrival in Italy, Cn. Pompeius,—being then twenty-three years of age, a hundred and thirteen years ago, began to form great projects," etcetera. Deducting $113+23=136$ years from 783, the consulship of Vinicius (the patron of Paterculus), we obtain 647 as the year A. U. C. in which Pompey was born, and which was recognized as the consulate of C. Atilius and Q. Servilius. This date, accordingly, is absolutely certain, but whether Pompey the Great was actually born in this year, or in some other of five years in the neighborhood of this date, is not so unequivocally certain. For Paterculus mentions it as a peculiar fact that "a mistake of five years in the age of this great man" had been made by some who ought to have known better, since "the succession of years, from the consulship of Atilius and Servilius, was so easy to settle." It will be shown, however, that this was not so "easy to settle," since an error of unmistakable reality must have been made, which caused the unparalleled confusion in the chronology of Rome.

In going forward from this preeminent point of conterminous contacts, we leave behind us the immensely helpful schedule of the Olympic games together with the subordinate but auxiliary scheme of the Athenian magistrates and secretaries for, from now on, both become obscure or conspicuous by their absence. When they do exert their actual existence, they require themselves to be authenticated by means of the Roman and sub-Roman eras. Even the succession of Roman consuls must be bolstered up, as it were, by its own solidarity and the continuity of enumeration, until we impinge on the authoritative and well-authenticated *Astronomical Canon* at the accession of the famous Cleopatra of Egypt and the beginning of the Third Civil War at Rome. The consuls of this long period may be readily registered by subdividing it, let us say, into four minor sections, as follows:

First, from the consulate of Lentulus and Crassus to the end of the social war or the beginning of the Mithridatic war and the ascendancy of Sulla the dictator.

Second, from the call to supreme command to the abdication of Sulla after a period of ten years.

Third, from the beginning of the Sertorian war to the triumph of Pompey.

Fourth, from the triumph of Pompey to his defeat by Julius Caesar, shortly after the accession of Cleopatra.

The consuls of the first section, according to the Capitoline Marbles, are as follows:

<i>A.U.C. Olymp.</i>		<i>Consuls.</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>
657	171 ¹	Cn. Domitius Ahenobarbus; C. Cassius Longinus	652	4618 96
658	171 ²	L. Licinius Crassus; Q. Mucius Scaevola	653	4619 95
659	171 ³	C. Caelius Caldus; L. Domitius Ahenobarbus	654	4620 94
660	171 ⁴	C. Valerius Flaccus; M. Herennius	655	4621 93
661	172 ¹	C. Claudius Pulcher; M. Perperna	656	4622 92
662	172 ²	L. Marcus Philippus; Sex. Julius Caesar	657	4623 91
663	172 ³	L. Julius Caesar; P. Rutilius Lupus	658	4624 90
664	172 ⁴	Cn. Pompeius Strabo; L. Porcius Cato	659	4625 89
665	173 ¹	L. Cornelius Sulla; Q. Pompeius Rufus	660	4626 88

In this brief line-up of consular terms, as many as three consecutive consulships are distinguished as pivotal points of contact between the two seriations of Roman time-keeping—the numerical and the magisterial. They are distinguished by a definite designation of year numbers, 663 for Caesar and Lupus, 664 for Strabo and Cato, and 664 for Sulla and Rufus. Since nine terms of office are thus added to the previous array of consuls, the numbers are not only logically correct, but they are documentarily supported by Velleius Paterculus, who, in his *Compendium of Roman History* (B. II, C. XV.), says: "For in the consulate of Lucius Caesar and Publius Rutilius, a hundred and twenty years from the present, all Italy took arms against the Romans." But $783 - 120 = 663$ A. U. C., and these 663 year A. U. C. are reckoned according to the publicly acknowledged system of the Capitoline Marbles, upon which these numbers were officially engraved.

For the next nine years of this period, during which Cornelius Sulla held supreme command and participated in the conduct of the Mithridatic war, the following consuls are recorded in the Capitoline Tables:

<i>A.U.C. Olymp.</i>		<i>Consuls.</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>
666	173 ²	Cn. Octavius; L. Cornelius Cinna	661	4627 87
667	173 ³	L. Cornelius Cinna II.; C. Marius VII.	662	4628 86
668	173 ⁴	L. Cornelius Cinna III.; Cn. Papirius Carbo	663	4629 85
669	174 ¹	L. Cornelius Cinna IV.; Cn. Papirius Carbo II.	664	4630 84
670	174 ²	L. Corn. Scipio Asiaticus; C. Norbanus	665	4631 83
671	174 ³	C. Marius; Cn. Papirius Carbo III.	666	4632 82
672	174 ⁴	M. Tullius Decula; Cn. Corn. Dolabella	667	4633 81
673	175 ¹	L. Corn. Sulla Felix II.; Q. Caecil Metellus Pius	668	4634 80
674	175 ²	P. Servilius Vatia; Ap. Claudius Pulcher	669	4635 79

In this instance, only one consulate is expressly numbered, that of M. Tullius Decula and Cn. Cornelius Dolabella, as having served in 672 A. U. C. according to the Capitoline Marbles, but another is implied by the double reference of the births of Cicero and of Pompey to this self-same year, Cicero at the very beginning, and Pompey near the end, of the consulate of Atilius and Caepio in 647. Pompey's age is given as twenty-three in the consulate of Scipio and Norbanus, consequently in 670; Cicero's as twenty-six, when M. Tullius and Cn. Dolabella were consuls, consequently late in the year 672. Pompey's age is computed by Paterculus (*C. R. H.*, B. II, C. XXIX), when he says: "Being then twenty-three years of age, a hundred and thirteen years ago, (he) began great projects" ($783 - 113 = 670$ A. U. C.). Cicero's twenty-sixth year in the consulate of Tullius and Dolabella is more indirectly, but just as definitely fixed, by an event of extraordinary significance in the preceding consulship. "In the consulship of Carbo and Marius, on the first of November, a hundred and eleven years ago, [Telesinus maintained] such a struggle with Sylla at the Colline gate, as brought both him and the republic into the utmost peril; nor was the state in more imminent danger when it beheld the camp of Hannibal within three miles of the city, than on that day when Telesinus—exclaimed that the last day of Rome had come." When the historian wrote, it was the year 783. When this crisis in the very existence of Rome occurred, it was "one hundred and eleven years" before. Consequently, the consulship in which this crisis occurred would be $783 - 111 = 672$ A. U. C. But, while the consuls Carbo and Marius were actually in office in the 111th year before Vinicius' term of office, the first of these 111 years, it actually began near the end of their consulate and, for the most part, overlapped the consulship of Tullius Decula and Cornelius Dolabella. It therefore locates both the former and the latter consulates in their respective places properly.

While Servilius Vatia and Ap. Claudius Pulcher were still in office, the conflict with Sertorius must have already begun, for the consuls M. Aemilius Lepidus and Q. Lutatius Catulus were appointed expressly for the purpose of quelling the new uprising which Sertorius had excited. The war, therefore, may be properly said to have ended in the eighth year of its duration, in the consular term of Gellius and Lentulus. The consuls for this war and the rest of the period are as follows:

<i>A. U. C. Olymp.</i>		<i>Consuls</i>	<i>Nab.</i>	<i>J. P. or B. C.</i>	
675	175 ³	M. Aemilius Lepidus; Q. Lutatius Catulus	670	4636	78
676	175 ⁴	D. Junius Brutus; M. Aemil. Mam. Lop.			
		Livian	671	4637	77
677	176 ¹	Cn. Octavius; C. Scribonius Curio	672	4638	76

<i>A. U. C. Olymp.</i>		<i>Consuls</i>	<i>Nab.</i>	<i>J. P. or B. C.</i>	
678	176 ²	L. Octavius; C. Aurelius Cotta	673	4639	75
679	176 ³	L. Licinius Lucullus; M. Aurelius Cotta	674	4640	74
680	176 ⁴	M. Terent. Varro Lucullus; C. Cassius	675	4641	73
681	177 ¹	L. Gellius Poplicola; Cn. Corn Lentulus Clod.	676	4642	72
682	177 ²	P. Cornelius Lentulus; Cn. Aufidius Orestes	677	4643	71
683	177 ³	Cn. Pompeius Magnus; M. Licinius Crassus	678	4644	70
684	177 ⁴	Q. Hortensius; Q. Caecilius Metellus	679	4645	69
685	178 ¹	L. Caecilius Metellus; Q. Marcius Rex	680	4646	68
686	178 ²	C. Calpurnius Piso; M'. Acilius Glabrio	681	4647	67
687	178 ³	M. Aemilius Lepidus; L. Volcatius Tullus	682	4648	66
688	178 ⁴	L. Aurelius Cotta; L. Manilius Torquatus	683	4649	65
689	179 ¹	L. Julius Caesar; C. Marcius Figulus	684	4650	64
690	179 ²	M. Tullius Cicero; C. Antonius	685	4651	63
691	179 ³	D. Junius Silanus; L. Licinius Murena	686	4652	62
692	179 ⁴	M. Pupius Piso Calp.; M. Valerius Messala	687	4653	61

Like the foregoing, the present section, too, has only one definite designation (692) of a consular year by number, the very last, that of Pupius Piso and Valerius Messala. The count, however, is entirely consistent. It is not only carried out, as might be expected of the Capitolian calculation, correctly, but it is reinforced and corroborated by the years of the Mithridatic war and the ages of Cicero and Pompey. The conflict with Mithridates commenced in the consulate of Cornelius Sulla and Pompeius Rufus, and is engraved in the marble tablets of the Capitol as 665 A. U. C. It is estimated by Cicero (*pro Manil.* C. 3) to have been raging in its twenty-third year in 66 B. C. or the consulate of Aemilius Lepidus and Volcatius Tullus, when it was committed to Pompey for termination. This, then, must have been the 687th year A. U. C. ($665 + 22 = 687$); and, since the war ended with Mithridates' self-slaughter in 63 B. C. or the consulate of Cicero and Anthony, and Pompey, after this tragic termination of the war, enjoyed his triumph two years later in the consulate of Piso and Messala, this final designation of the triumphal year as the 692nd from the foundation of the City, decides the balance in favor of the consistent seriation of this section.

One of the foremost events in the scope of this section which has rendered the consulate of Cicero and Anthony illustrious and famous above all others, is the birth of Augustus. It is an event of the first magnitude because of the immeasurable extent of the influence released and broadcast during the lifetime of this man. If for no other reason than the correction of chronological science, the time-limitations of this man's life deserve to be established. In truth, we cannot get along without it.

"The birth of the emperor Augustus, ninety-two years from

the present time, who was afterwards, by his greatness, to cast a shade over all men of all nations, added no small lustre to the consulship of Cicero," says Paterculus in his *Compendium of Roman History* (B. II. C. XXXVI.). The consulship of Cicero, as we have seen, was that of 63 B. C., and was enumerated as the 690th year from the foundation of the City. Yet Eutropius (*Abr. R. H.*, C. XV.) makes this year the 689th A. U. C., while the actual interval of time (subtracting ninety-two years from 783) makes it ninety-one years only. There is evidently an excess of one or two years indicated here in the count of A. U. C. years, which must be eliminated somehow. For, if the actual distance between the two end-terms (excluding the fragments) is ninety-one solid years, and the age of Augustus was seventy-six years, then the birthday of Augustus was supposed to fall into the September of 63 B. C. or 690 A. U. C.; but if his age was seventy-seven years, as asserted by Josephus, then the September of 64 B. C. or 689 A. U. C. was meant. In either case, the consulship of Cicero was intended, in the former case without regard to the prolepsis of the Roman calendar in those days; in the latter, with scrupulous respect to the consulate as projected into the past. The first three quarters of 63 B. C. or 690 A. U. C. unquestionably belonged to the consulship of Cicero, the last quarter of 64 B. C. or 689 A. U. C. made up the first part of his official term. It is not to be wondered at that grievous mistakes occurred in the ages of the greatest men under circumstances so confusing as the chaos of the Roman calendar. As to the correct age of the great emperor, it seems only fair to the individual to take his own word as the best authority on the subject. In the consulate of his own grandson, Caius Caesar, at a time when he was actually engaged in the administration of consular duties, the aged emperor wrote a letter to his young representative in the far East, in which he himself declares: "On days like the present [September twenty-fourth], my eyes look around for my Caius. Wherever thou hast been on this day, I hope thou hast celebrated joyfully and in good health my *sixty-fourth* birthday; for I have escaped, as you see, the common climacteric of all old men—my *sixty-third*," etc. But the consulate of Caius Caesar, during which Augustus had rounded out his sixty-third year and was about to run in upon his sixty-fourth year, was the initial year of the Christian Era, whose first year corresponded to the 4714th year of the Julian Period and the 748th year of the Nabonassan Era. There can, therefore, be no doubt that the emperor himself believed that he had been born in 63 B. C., and that the consulate of Cicero and Anthony comprehended and included the twenty-fourth of September of the year 690 A. U. C. Nevertheless the emperor was mistaken as to his age, even as so many other

prominent men were in those days—(Tiberius, Claudius, etcetera, etcetera)—for if, as the Jewish historian's age of Augustus implies, he lived to be seventy-seven, then, of course, he was born in the proleptic part of Cicero's consulship, which overlapped and lapsed into 64 B. C. or 689 A. U. C. This has been proven to be the case by Dr. Jarvis, (*Chron. Introd.*, pp. 189 & 245), and by Mr. Page, (*New Light*, pp. 58–61). The truth is simply this: In the emperor's computation of his own age, there is a total disregard or oversight of the huge accretion of time contained in the so-called year of confusion (47–46 B. C.) This long year of confusion was not an imaginary state of mind, but a condition of facts that really mattered. It must therefore be taken into account as a real entity, and not ignored as a day-dream, if our computations of time involving this chaotic period are to be correct. It is true the intercalations of that year did not amount to a full twelve month, still it is better to err in naming this quarter of a year a consular term of office than to leave it out of the reckoning altogether. It had an existence, and is needed to connect with the fall of the preceding year, 64 B. C. or 689 A. U. C. On September twenty-third of this year, taking the consulate of Cicero by the forelock, as it were, the future emperor and arbiter of the world's fate, was born, as demonstrated, by the horoscope cast for Augustus by Theogenes. It ran: "At sunrise, September twenty-third, the moon in Capricorn, rising, toward the east." The solution of this problem has been worked out by Mr. Page, and rendered thus: "As the moon, at the time of the eclipse [mentioned by Cicero as falling in the beginning of his consulate, about the time of the *feriae Latinae*, when Mons Albanus was covered with snow, hence on November seventh, 65 B. C.], was exactly opposite the sun, the moon's true place at that time must have been 1 s. 13 deg. 52 m. 25 s.; to which add forty-five days and one hour from the eclipse to the twenty-third of September (the Julian time of the birth of Augustus), and the moon's place would be in Capricorn, 7 deg. 21 m. 36 s., or about sixty-seven degrees below the horizon at sunrise on the Julian twenty-third of September, B. C. 64." It is, therefore, as plain as a pikestaff that any computation, whether of the emperor himself or of the historians, which does not take into account the great intercalations of the year of Confusion, must necessarily be wrong. We therefore, state it as an incontrovertible fact that, by the horoscopic as well as historic limitation of the life-time of Augustus, the 689th year from the foundation of Rome according to the Capitoline computation (supposed co-extensive and co-terminous with J. P. 4650 by Eutropius) is brought into indissoluble connection with the consulship of Cicero and Antony, which, though in the main located in 690

A. U. C., is so emplaced on the scale of Time that it cannot be severed from the winter season of J. P. 4650-51 or 64-63 B. C.

Proceeding to the last or fourth section of the period staked off before, we not only feel more solid ground under our feet, but we realize, too, that marching has become more difficult, due to the very hardness and roughness of the terrain. The consulates of this sector of the front are these:

<i>Olymp.</i>		<i>Consuls</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>
<i>A.U.C.</i>	<i>Cen. Eus.</i>			
693	180 ² 180 ⁴	L. Afranius; Q. Caec. Metellus	689	4655 59
694	180 ³ 181 ¹	C. Jul. Caesar, M. Bibulus	690	4656 58
695	180 ⁴ 181 ²	L. Piso; A. Gabincus	691	4657 57
696	181 ¹ 181 ³	P. Lentulus; Q. Metellus	692	4658 56
697	181 ² 181 ⁴	Cn. Lentulus; L. Philippas	693	4659 55
698	181 ³ 182 ¹	Cn. Pompeius II; M. Crassus II	694	4660 54
699	181 ⁴ 182 ²	App. Claudius; L. Domitius [Cn. Domitius; M. Messala]	695	4661 53
700	182 ¹ 182 ³	Cn. Pompeius III [Q. Metellus]	696	4662 52
701	182 ² 182 ⁴	M. Marcellus; Serv. Sulpicius	697 ¹	4663 51
702	182 ³ 183 ¹	L. Paulus; C. Marcellus	698 ²	4664 50
703	182 ⁴ 183 ²	— — — — —	699 ³	4665 49
704	183 ¹ 183 ³	L. Lentulus; C. Marcellus	700 ⁴	4666 48
705	183 ² 183 ⁴	C. Jul. Caesar II; P. Servilius	701 ⁵	4667 47

It is a regrettable fact that, in the entire compass of this section, there is not a single engraving of a year-number left intact on the Capitoline Marbles, if at all extant. All the numbers in this case are suggested by chronologists of a later date or deduced from the logical sequence of numbers. Still, even thus the seriation of consulates is perfect, though the enumeration of years is at fault. For one thing this present registration of consular terms ends with the life of Pompey, who almost concluded his fifty-eighth year on the day of his assassination. He was born in 106 B. C. and perished in 47, shortly after the battle of Pharsalia, in the second year of the Civil war, in the consulship of C. Julius Caesar and P. Servilius Vatia Isauricus. The year itself, J. P. 4667 or 47 B. C., in which the magnificence of Pompey fell and the grandeur of Caesar rose to sublime heights, is sustained well enough, but, due to the well-known prochronism of two years in this section of Roman chronology, it is necessary to divest it of the rank overgrowth of error and mistake.

As intimated before this, when, in harmony with the history of Diodorus, we placed the archonship of Herodes at Athens in the third year of the 180th Olympiad (in keeping with the reckoning of Censorinus) and Caesar's war in Spain in 59 B. C., we are about to be confronted with the much debated breaking-points of the crux of Roman chronology. With the indicated emplacement of Julius Caesar's first consulate in J. P. 4656 or 58 B. C., and of his second after an intermission of ten full years, in

J. P. 4667 or 47 B. C., the divergencies from the commonly accepted systems of chronology begin. We place the extremely important second consulate of Julius Caesar in 47 B. C. because 47 B. C. is the date of the battle of Pharsalia, as proven by a coin of the Antiochian Era's 54th year (*U* Actiac Era's 36th in 8 A. D.); because 47 B. C. is the fifth year of Cleopatra's rule, particularly noted for the great event by Eusebius (*Chron.* p. 260); and, finally, because the ten years of Caesar's administration of Gaul embrace three definite, decisive dates, which necessitate a lowering of the entire period in Caesar's life from 59–48 B. C. to 58–47 B. C. The three dates are these: First, Caesar's first invasion of Britain which must have occurred in the year 54 B. C.; then the appointment of Pompey to his third consulate which must have taken place in 52 B. C. and then Cleopatra's accession to the throne of Egypt upon the death of Ptolemy Auletes which must have happened in Nab. 697 or 51 B. C.

In the first place, Caesar himself (*de B. G.* IV. 28) gives the following data on his first invasion of Britain. Besides saying that "this was the year in which Cn. Pompey and M. Crassus were consuls" (both for the second time), he relates that "*four days after we had come into Britain,*" so great a storm suddenly arose that none of the ships could maintain their course, and some, "through necessity, made for the continent." . . . "*It happened that night to be full moon,*" and "winter" was approaching. Consequently the invasion occurred closely enough to the equinox before winter, i.e. the autumnal equinox, to make the fulness of the moon a fact worthy of note.

Now "it is stated in history," says J. J. Bond (in his *Handbook for Verifying Dates*), "that Caesar invaded our shores [Britain] on the 26th of August 55 B. C." This is saying more than Caesar said; and is it true to facts? To ascertain a more commensurate adjustment of facts, compute the date of the full moons occurring within a lunation of the autumnal equinox for a year or two before and after the consulate of Pompey and Crassus. The 14–15th day of any lunar month in any lunar calendar will automatically deliver the date. Just add:

Cal. P.	III ¹	Sel. 148–153 =	165–160 B. C. =	1923 ds.
	III ²	Sel. 154–172 =	159–141 B. C. =	6940
	III ³	Sel. 173–191 =	140–122 B. C. =	6940
	III ⁴	Sel. 192–210 =	121–103 B. C. =	6940
	IV ¹	Sel. 211–229 =	102– 84 B. C. =	6940
	IV ²	Sel. 230–248 =	83– 65 B. C. =	6940

36623 d.

As a fraction of Cal. Per. IV³ add the eight years preceding Sel. 257 or 56 B. C., the first (anachronistic) date for the invasion of Britain.

$$\text{Sel. 249 to 256 (incl.)} = 8 \times 354$$

2832 days in 8 common Seleucic yrs.
 90 days in 3 embolismic months
 3 days extra-intercalary

2925 days added to sum above
 36623 ds.

39548 days transpired before Sel. 257.

On the Julian calendar's side compute the one hundred and eight years, 164 to 57 B. C. (incl.);

$$365 \times 108$$

2920
 3650

39420 d. in 108 common Julian years.
 27 leap year days
 9 d. in 165 B. C. (Dec. 23 to 31, incl.)

39456 days before 56 B. C.

Deducting these 39456 days from the 39548 days in the Jewish calendar's side gives 92 days as the balance in the Roman calendar up to date: Adar 29 corresponding to April 2, 56 B. C. Half a year or 177 days will take us to the lunation containing the full moon before or after the autumnal equinox, which, being Sept. 24—the 267th day of the year, may not, and must not, be exceeded by any plenilunar date.

39548	39548	=	92 d. in 56 B. C.	92
177				177
39725	354		+354 d. in Sel. 257	269
- 15			446	- 15
7)39710			-365 d. in 56 B. C.	254 =
5672 +6				Fri., Sept. 11
39902	39902	=	81 d. in 55 B. C.	81
177				177
40079	354		+354 d. in Sel. 258	258
- 15				- 15
7)40064			435	243 =
			-365 d. in 55 B. C.	Tues., Aug. 31
5723 +3	40256	=	70 d. in 54 B. C.	70
40256				177
177				

40433	{ 354	354 d. in Sel. 259	247
+ 15	{ 1	1 d. extra-intercal.	+ 15
	{ 30	30 d. emb. mo.	
7)40448		455	262 =
		-366 d. in 54 B. C.	BA Mon., Sept. 18
5778+2			
40641	40641 =	89 d. in 53 B. C.	89
177	354	354 d. in Sel. 260	177
40818		443	266
- 15		-365 d. in 53 B. C.	- 15
7)40803	40995 =	78 d. in 52 B. C.	251 =
			Sat., Sept. 8
5829+0			

Accordingly, if "*the time of the equinox was near*" (De Bello Gall., B. IV. C. 36), indeed only "*several days*" distant from the full of the moon, it stands to reason that the year presenting the greatest proximity possesses the greatest probability of being historically the true date for the first invasion of Britain. Now the moon was full

in 56 B. C., on Fri., Sept. 11, 13 days before the Equinox
in 55 B. C., on Tues., Aug. 31, 23 days before the Equinox
in 54 B. C., on Mon., Sept. 18, 6 days before the Equinox
in 53 B. C., on Sat., Sept. 8, 16 days before the Equinox

Hence, in every year the full of the moon was so far removed from the equinoctial breaking-point as to have lost all relevancy to the means of reckoning and recording time. Consequently the only year possessing a semblance of relativity and therefore standing a show of being adjudged the correct date for Caesar's invasion of Britain is J. P. 4660 or 54 B. C.

The second datum contained in the decennium between the two first consulships of Julius Caesar is the appointment of Pompey to the consular office without a colleague. We know very positively from a statement of Ascanius when this creation of a consul by an interrex took place. It came to pass when the then-employed calendar of Numa, in the 10th year of its cycle, was intercalated at the proper time and in the appropriate place, with a month of twenty-two days. Being expressly mentioned, not only as executed, but used as a means of dating a governmental transaction, it is a matter of fact well established that the last intercalation of a major Merkedonius (23d.) occurred in the great year of confusion 46 B. C., the last minor Merkedonius in 48 B. C. the preceding Merkedonius of 23 days in 50 B. C., and the trenchant insertion of a minor Merkedonius in 52 B. C. Consequently the creation of a consul, Cn. Pompeius III, by the interrex Serv. Sulpicius on the V. Kal. Mart. (the 24th of February) in the month of intercalation (*mense intercalario*) in J. P. 4662 or 52 B. C. (see Ascanius, Arg. in Cic. Milon, p. 778), is a fact which must be recognized in the revision of history.

For ready reference compare:

<i>Cycle No.</i>	<i>Intercalations</i>	<i>Consuls</i>	<i>J.P.</i>	<i>B.C.</i>
2		[M. Tullius Cicero & C. Antonius]?	4653	61
3	Merkedonius minor [22d.]	D. Jun. Silanus & L. Licin. Murena	4654	60
4		L. Afranius & Q. Avez. Metellus	4655	59
5	Merk. major [23d.]	C. Jul. Caesar I X M. Bibulus	4656	58
6		L. Piso & A. Gabinius	4657	57
7	Merk. minor [22d.]	P. Lentulus & Q. Metellus	4658	56
8		Cn Lentulus & L. Philippus	4659	55
9	Merk. major 23d.	Cn. Pompeius II. X M. Crassus		
10		II.	4660	54
		App. Claudius & L. Domitius	4661	53
		[Cn. Domitius & M. Messala]?		
11	Merk. minor 22d.	Cn. Pompeius III. [& Q. Metellus]	4662	52
12		M. Marcellus & Serv. Sulpicius	4663	51
13	Merk. major 23d.	L. Paulus X C. Marcellus	4664	50
14		— — — — —	4665	49
15	Merk. minor 22d.	L. Lentulus & C. Marcellus	4666	48
16		C. Jul. Caesar II. & P. Serv. Isauri-		
		cus	4667	47
	Merk. major 23d.	C. Jul. Caesar II. Dict.; M. An-		
		tonius, M. Eq.	4668	46

The third chronological datum incorporated in this period of Caesar's life is the beginning of Cleopatra's associate reign, before she was made sole ruler by Julius Caesar after his victory at Pharsalia. As noted by Cicero in one of his letters, Cleopatra began to reign in the year in which the consuls of the following year were designated or nominated, but not yet actually elected, for the consular office: consequently in the year J. P. 4663 or 51 B. C. According to the Canon of Ptolemy, this was positively before the final day of Nab. 697, which fell in that year on Sept. 6th. So, if her *tenth* year began before the 24th of June, when the nephew and adopted son of Julius Caesar, the later Augustus Caesar, possessed himself of his first consulship, it is certain that Cleopatra's first acquisition of regal power found historic and canonical recognition in the month of May or April, and the consular term preceding the one of L. Paulus and C. Marcellus, the consulate of M. Claudius Marcellus and Serv. Sulpicius connoting the accession of Cleopatra must be immutably affixed to the year J. P. 4663 or 51 B. C.

With this attempt at restoring the career of Julius Caesar, we may proceed to the consideration of that great strategical accomplishment which gave him authority and power to grant autonomy to the city of Antioch, the governorship of Galilee to a youth named Herod at the age of fifteen, the queenship of Egypt to Cleopatra, who was then only seventeen, and a reformation of the Roman Calendar, not only to the people of Rome, but to all the nations of the earth—all in the year J. P. 4667 or 47 B. C. after he had won the decisive battle of Pharsalia.

The season of the year in which the encounter at Pharsalia

ensued is described by historians in terms unmistakable enough, in themselves, yet, owing to the extravagant shifting of the months in the Roman calendar at that time, certain chronologists have essayed to shift matter of fact to an opposite season of the year. Thus, for instance, Prof. Totten, of the anachronistic school of Dr. Jarvis, Page, and so forth, has evolved the following arrangement of the events and chronological features of the time surrounding the conflict at Pharsalia. "This battle," says he, "must have been fought *early in February*, 48 B. C. (nominal April), and Caesar, as soon as possible thereafter, began his difficult *Winter* march towards Egypt (see Suetonius, *Caes. C. XXXV*)." But the characteristics of the seasons are brought out clearly and convincingly enough by the historians.

Having crossed the Rubicon and overrun all Italy in sixty days, and, having failed to intercept Pompey and his party at Brundisium, Caesar returned to Rome, where he secured the sinews of war; he first set out for Gaul (where in passing, he laid siege to Marseilles) and Spain (where he defeated Pompey's lieutenants Afranius, Petreius and Varro), and then, terminating the siege of Marseilles in a very short time, he returned again to Rome for more honors and more power. This was near the close of the consulate of Marcellus and Lentulus, for, having been created dictator on the nomination of Lepidus, his master of the horse, he abdicated in eleven days, desiring rather to be consul in the ensuing year, which commenced in those tumultuous times several months before the winter solstice. Hence it is that his biographer Plutarch says: "He [Caesar] caused himself to be declared *consul* with Servilius Isauricus, and then went to prosecute the war," against Pompey. It was the grave season of *autumn*, as he himself says (*B. Civ. III. 2*), when Caesar passed over into Apulia from the salubrious regions of Gaul and Spain. *Winter* was approaching, and Pompey moved into winter quarters. "It was at the time of the *winter solstice*, the beginning of January, which answers to the Athenian month Poseideon, that he [Caesar] set sail." And that this description of time was not a misapprehension on the part of the chronicler, but a valid conclusion of the troops left behind by Caesar in Brundisium, may be gathered from the complaints and protestations voiced by them at the time. "The gods themselves," they said, "cannot force the seasons, or clear the *winter* seas of storms and tempests. *And it is in this season that he would expose us.*" Then moving on to Pharsalia, "before the corn was cut" (*B. Civ. III. 81*), Caesar lured Pompey to a passage of arms, when the heat of *summer* was at the highest (*Cic. II in Verr. V. 12*). Again, a touch of real life confirms the statement of the historian. The biographer Plutarch, relating this incident from the life of Brutus, who later conspired against Caesar, has this affirmation to offer:

"Thus [in reading and study] he passed *the day before the battle of Pharsalia. It was the middle of summer, [and] the heats were intense.*" What other season could this be but an honest-to-goodness red hot summer? And when, after the perfidious murder of Pompey on the day before or after his sixtieth birthday, which in this case corresponded to the thirtieth of September [prid. Kal. Octobres], Caesar concluded the Alexandrian war and crowned Cleopatra queen of Egypt, "it was winter" (as Suetonius has it, *Caes. c. XXXV*), what else could it be but the "brumalia" preceding the *winter-solstice* of December, J. P. 4667 or 47 B. C.? Finally, to cap the climax, at what other time was Julius Caesar at liberty to give his attention to calendric reform but when, delayed at Alexandria for a month, at least, by the Etesian winds, (which blow most contrariwise for sailing from the tenth of July to the twenty-eighth of August), he was forced to refrain from military activity, and was therefore at leisure to listen to the calendar makers Sosigenes and Flavius on the project of reforming the Roman calendar, in the year immediately previous to the "long year of confusion," J. P. 4667 or 47 B. C.? Had the battle of Pharsalia been fought in the summer of 48 B. C., or even in the February of 48 or 47 B. C., the great reformer of the Roman ephemeris would have been far removed from the delay by the Etesian winds, and been either too far ahead or too far behind the "year of confusion" to be bothered with such an affair as calendar reform. It follows, therefore, that the decisive battle of Pharsalia was fought in the summer, not only the summer immediately preceding the winter of 47-46 B. C., but the summer succeeding the winter of 48-47 B. C.; in a word, the summer of Caesar's II consulship in the year of the Nabonassan Era 701 or of the Julian Period 4667.

Notwithstanding the foregoing evidence in favor of the year 47 B. C. as the correct date for the battle of Pharsalia, nearly all the instances of appeal to the era derived from this date locate the beginning of the era in advance of the event, in the autumn of 49 B. C., as if it had occurred in the preceding summer.

1) A coin of Tiberius was struck under Flaccus, the propraetor of Syria, in the eighty-second year of the era of Antioch. Now if Flaccus died at the close of the consulate of Galba and Sulla, 33 A. D., eighty-two complete years would carry us back to 49 B. C., when the first of the eighty-two solid years of the era would begin with 48 B. C.

2.) A coin of Galba, the emperor, was struck under Mucianus in the 117th year of the Antiochian autonomy. If the 117th year of Antioch, commenced in the autumn of 68 A. D., corresponding in the main with 69 A. D., the first of the series commenced in the autumn of 49 B. C. and covered the greater part of 48 B. C.

3.) According to Josephus Aegyptius, the Nicene Council of the Christian Church was held in the 373rd year of the Antiochian Era. But this convention is universally known to have been held in 325 A. D. and $373 - 325 = 48$ B. C.

4.) According to Malela, the new capital city of Constantine was dedicated in the year of Antioch 378. The dedication of Constantinople, however, is placed by the *Alexandrian Chronicle* in the consulship of Gallicanus and Symmachus, or 330 A. D. But $378 - 330 = 48$ B. C.

5.) Again, according to the *Alexandrian Chronicle*, the life of the emperor Constantine was changed in the 410th year of the Era of Antioch, in the consulship of Taurus and Florentius, or 361 A. D. But if the 410th year of the era began in the autumn of 361 A. D., the beginning of year one fell in the autumn of 49 B. C. and the bulk of the year in 48.

6.) Again, according to Malela, the emperor Julian was slain in June of the Antiochian year 411. But his death is known to have occurred in 363 A. D. But $411 - 363 = 48$ B. C.

7.) From Malela, too, we learn that Leo junior was consul in the Antiochian year 522, and died in the eleventh month of his consulship in November of the year 523 (Antioch). But the consulate of Leo junior Augustus fell in A. D. 474. Consequently, $522 - 474 = 48$ B. C.

8.) From Malela, once more, we learn that the emperor Zeno died in April of the year of Antioch 539. But Zeno died in April, A. D. 491. Consequently, $539 - 491 = 48$ B. C.

9.) According to Evagrius (*Hist Eccl.* IV. 1), Justin became emperor in July of the year of Antiochian independence 566, and the *Alexandrian Chronicle* adds that Justin became king in the consulship of Magnus. But Magnus was consul in A. D. 518. Hence it follows that $566 - 518 = 48$ B. C.

10.) Finally, we are informed that Justinian reigned with Justin in April of the year 575 of Antioch, the *Alexandrian Chronicle* adding that it was in the consulship of Προκειμένου Μαβουργίου Ρωμαίου.

But the consulship of Mavortius fell in A. D. 527. Hence it follows that, if $575 - 527 = 48$ B. C., the beginning of the era of Antioch fell in the autumn of 49 B. C. and the balance of the year in 48 B. C., when, itself bearing the event in its bosom, the battle of Pharsalia was fought and Caesar granted autonomy to the tyrannically oppressed city of Antioch.

Feeling confident that these ten instances of the employment of years from the battle of Pharsalia known as the era of Antioch are nothing but proofs of an unaccountable aberration from the truth, we may appease a rising distrust of our position by tracing these errors to the well-known prochronism of two years so

prevalent and so apparent in this section of Roman chronology. The existence of error in the case of the battle on Pharsalia may be suspected, in the first place, from the improper emplacement of this great event in the third year of Cleopatra IV instead of her *fifth*, since this famous princess was coregent with her brother Dionysius for four years from Nab. 697 to 700 (inclus.), according to Ptolemy's *Canon*, *before* her contact with Caesar: therefore was not made sole regent of Egypt until *after* the battle of Pharsalia. The battle having been fought in the summer following the first of Thoth of the 701st year of Nabonassar, must be enregistered in the fifth year of Cleopatra, which (since Thoth first in that year fell on September fourth, 48 B. C.) corresponded to the last quarter of 48 B. C. and the first three quarters of 47 B. C. If, then, the battle was fought on the V. Id. Sextil (nominal August ninth) of that year, the day coincided very nearly with the *summer solstice* of June twenty-fourth, 47 B. C.; and the beginning of the era of Antioch, which derived its existence from the victory of Caesar at Pharsalia, dates from, or about, the autumnal equinox of Nab. 702 or 47 B. C.

By a comparison of this era of Antioch with another era of the same character; viz. the Actiac or Egyptian Augustan era, we may prove the prevalence of this error of two years. A coin of Antioch, in evident contravention to the foregoing citations of the era, coordinates the thirty-sixth Actiac year with the fifty-fourth year of the Antiochian era. Now, if we reverse the 267 years of the Actiac or Egyptian Augustan era from the 986th year of the Nabonassan era, when Censorinus computed it, we reach the 719th Nabonassan as the year in which the battle of Actium was fought (on the fourth of September 30 B. C.), and the 720th Nabonassan as the initial year of the Actiac era. The thirty-sixth year of this era corresponding to the fifty-fourth year of Pharsalean fame (7–8 A. D.), eighteen Pharsalean years preceded the series of Actiac or Egyptian Augustan years, which began on the first of Thoth, 720 Nab. E., or August thirty, 29 B. C. But eighteen years before this epochal date carries us back to the 702nd of the Nabonassan era as the first year of the Antiochian era, and to the preceding 701st year (Nab. E.) as the date on which the battle of Pharsalia was won.

But if Pharsalia was fought in the summer, soon after the solstice of 47 B. C., no matter how many subsequent dates appear to prove that this famous fight occurred in 49 or 48 B. C., they can all be shown to be false by a whole year or two from circumstances attending certain time-determinations in the wake of 42 B. C. Take, for instance, the duration of the civil war then about to begin. While Livy (in his *Epitome* C. CXXXIII) says: "Thus ended the civil war, after it had lasted [two or] *one-and-*

twenty years," Paterculus affirms more truthfully: "The civil wars, which had lasted *twenty* years, were ended," indicating thereby that the imposition of one or two years, all preceding events, such as the assassination of Caesar and the defeat of Pompey by Caesar at Pharsalia, are wrongfully pushed up higher than where they belong to the extent of one or two years. Again, taking the duration of Augustus Caesar's reign, Suetonius asserts that Octavianus held the government during a period of *four-and-forty* years, in which assertion he is seconded by Eutropius, who says: "From that period [when he was elected consul] he held the government as sole ruler for *forty-four* years. But Ptolemy's Astronomical Canon, with better regard to the facts, restricts his actual sole rule over Egypt and the whole then-known world to the forty-three Nabonassan year from N. E. 719 to 761 (both terms included), which, eliminating the 364 proleptic or hieratic days of Nab. 719 [as belonging properly to Cleopatra], makes the entire period of his supremacy from the 29th of August, 29 B. C., to the 19th of August, 14 A. D., amount to only *forty-two* years minus ten days. There is, therefore, a manifest error of two whole years in the interval between the death of Augustus and the battle of Pharsalia if the reign of Augustus is made to overlap the last two years of Cleopatra's reign and permitted to push back the date of Pharsalia from Cleopatra's *fifth* year to her *third* or *fourth*, i.e. 49 or 48 B. C. Finally, we may prove the existence, and in fact the predominance, of this error after the adoption of the Varronian scheme of reckoning the years of Rome, by the inconsistency of this mode of reckoning with the established rules of arithmetic. We know from Josephus, the historian of that period, that Herod the Great captured the city of Jerusalem in a Jewish year of rest (36 B. C.), and from the Talmud, the Bible of the Jewish people, that the City was destroyed by Titus in the same kind of year, i.e. a "seventh" or Sabbatic year (70 A. D.). But if both the first and the last year of this period were "*seventh*" years, there followed in the sequence of the initial seventh year, not, as Josephus says (Antiq., B. XX. C. X §1), "*a hundred and seven*" (107) years, but, as required to be divisible by *seven* without a remainder, not more than *one hundred and five* (105) years. There must, therefore, have been an aberration from the truth of history somewhere in the reign of Augustus, which, if persisted in, must necessarily falsify the chronology of that period to the extent of two whole years. The possibility and actuality of such an error is, however, no more inconceivable than the perpetuation of a four full year error by all the nations of the civilized world today, who, instead of beginning the Christian Era with J. P. 4710 or 4 B. C., continue for centuries to commence with J. P. 4714 or 1 A. D.

When, therefore, cities like Antioch and Damascus derived their civic freedom and political independence from a world-shaking event like the battle of Pharsalia, and accordingly issued a system of currency or coinage in commemoration of this stupendous, prodigiously uplifting and liberating influence, this action of theirs not only proclaims the state of heart which led them to indulge their feeling of gratitude in outward signs and symbols, but it also conveys the conviction of mind that the time-determination expressed upon their medium of exchange was chronologically correct. It stands to reason, then, too, that, when a date is as unimpeachably fixed as that of the battle of Pharsalia, however highly we may think of the five or six theoretical systems of chronology computing the era "from the foundation of Rome," five of them must be wrong.

We have, for instance, one estimate of time relating to the beginning of the war, by Velleius Paterculus (*Comp. R. Hist. B. II, C. XLIX*). He says: "In the consulship of Lentulus and Marcellus, 703 years after the foundation of the city, and seventy-eight before the commencement of your consulate, Marcus Vinicius, the civil war blazed forth." Of the two statements as to the time of the civil war's beginning neither one nor the other is accurate. It was not seventy-two years before the commencement of his patron's administration, but $29 + 46\frac{1}{2} = 75\frac{1}{2}$ years. And it was not in the 705th year A. U. C. If it had been, there would appear a lapse of one year in the count which we could not explain. Since all writers regarding this period agree that ten complete years intervened between Caesar's first consulship with Calpurnius Bibulus and his second with P. Servilius Isauricus, it is evident that their year-numbers (both extremes included) would be 694 to 704, and the one preceding these, the consulate of L. Afranius and Q. Caecilius Metellus Celer, would be either left unnumbered or else enumerated as a double (like the bissextile day in a Julian leap year). But of such a procedure there is no record.

If, on the other hand, we reject the figures of Paterculus, as not historical, but purely academic or conjectural, and acknowledge the fact that the official reckoning of the Capitoline Tablets was still in vogue, then the battle of Pharsalia must be adjudged to have been fought in the year 705 A. U. C., and the ten years intervening between the first two consulships of Caesar must be reckoned to have been 696 to 705. The first consulship of Caesar would be accounted the 695th, and the consulship preceding it the 694th. The continuity of the Capitoline reckoning would then be preserved perfectly, and the emplacement of the annals connected therewith unshakable.

With a profound feeling of relief and joy, we now approach

the long-looked for point of contact at which the *Astronomical Canon* of Ptolemy assumes the command of the chronological field. Henceforth we shall not need to look about for artificial divisions and subdivisions of time-reckoning. All we shall have to do is simply to follow the reigns of the Roman emperors as outlined and limited by the *Astronomical Canon*. As to Cleopatra, being in reality but a creature of Rome, her sub-Roman rule may be treated in the same line along with their reigns. So here we present the consuls at Rome while Cleopatra III. was queen of Egypt.

When did Cleopatra begin to reign as a sole sovereign of Egypt? The circumstance that, according to the figures of the *Chronicon* of Eusebius, the assassination of Julius Caesar fell in the ninth year of Cleopatra, while the arrival at Rome and the election to the consulate of Octavius, his heir and successor, occurred in her tenth, enables us to determine the approximate time when Cleopatra began to reign. The year when she commenced to use her authority may be gathered from incidental notices of then current events found in a letter written by Cicero about the Kalends of Sextilis. It was at the time when L. Aemilius Paullus and C. Claudius Marcellus were only *designated* consuls, or *elected* to the consulship, but not, as yet, inducted into office; consequently the year before their own administration, which, we have seen, occupied the term 702 A. U. C. or 50 B. C. This previous consulship was that of Serv. Sulpicius Rufus and M. Claudius Marcellus, found to belong to the year 701 A. U. C., 51 B. C. or Nab. 697. For the period of Cleopatra's associate and sole reign we should have a corresponding list of twenty-two pairs of consuls, or, if not all consuls, then dictators, triumvirs, or other officials in their places. In Nabonassan terms, the period of her joint and sole reign was encompassed in the years 697 to 718 (both extremes included). In order, however, to begin with a correct correlation of events and dates both as to Egyptian and Roman affairs, let us first allign the principal data in the chronology of both peoples.

The three outstanding historical high-lights of Cleopatra's reign with reference to Roman and particularly Caesarean affairs, as explicitly stated by Eusebius, in his *Chronicle* (p. 260), [see Clinton, *F. H.*, Vol. III, p. vii], are the years 5 (ε), 9 (ϑ) and 10 (ι). In terms of the Nabonassan, Capitoline, and Christian mode of reckoning they are:

<i>Years</i>	<i>Nab.</i>	<i>Cap.</i>	<i>J.P. or B.C.</i>	
5 (ε)	701	706	4667	47
9 (ϑ)	705	709	4671	43
10 (ι)	706	710	4672	42

While the events relating to Caesar are severed from the consulates to which they belong and hooked up with consulships to

which they have no relevancy, the matters of fact there recorded remain fixed to the regnal years of Cleopatra and by them to the era of Nabonassar. Thus we obtain an absolutely reliable and well-authenticated time-limitation of Caesar's life and reign. At the fifth year of Cleopatra, Nab. 701, Caesar is expressly declared to have become the first monarch of the Romans. The ninth year of Cleopatra is distinctly stated to have been the fourth year of Caesar, and the tenth year of the queen is explicitly declared to have been the fifth year of the dictator and emperor, with the comment: "Gaius Julius Caesar slain at Rome."

Now, if Julius Caesar became monarch of the Romans by his victory at Pharsalia in the course of his own second consulship together with Servilius Vatia Isauricus, and this occurred in the *fifth* year of Cleopatra, toward the close of the 701st year of the Nabonassan era, the last day of which fell on September third—and gave this year to Cleopatra as her fifth, there must have been a succession of five consulships at Rome contemporaneously with Cleopatra's five years of regency. Now Cleopatra was made sole and independent queen of Egypt in her patron's own second consulship in the fifth year of her partly associate reign, consequently in J. P. 4667 or 47 B. C. The Civil war which led to Caesar's victory and Cleopatra's elevation, broke out in the preceding consulate of Claudius Marcellus and Cornelius Lentulus, consequently in Cleopatra's fourth year, Nab. 700. The beginning of Cleopatra's reign was made in the year in which Aemilius Paullus and C. Claudius Marcellus were *nominated* and *designated* consuls for the ensuing year, consequently for Cleopatra's *second* year, Nab. 698, the current first consular term having been administered by Ser. Sulpicius Rufus and M. Claudius Marcellus, consequently, in Nab. 697 or 51 B. C. The two Marcelli, Marcus and Caius, who served as consuls contemporaneously with Cleopatra during her first two years of government, are mentioned by Cicero (*Ep. Att.* VII. 1) as the "two superior" officials under whom, consecutively, the resolutions concerning Caesar's province were enacted. They obviously served in the first two successive years of Cleopatra's reign, Nab. 697 and 698, or 51 and 50 B. C., leaving the *third* year of her queenship, Nab. 699 or 49 B. C., unoccupied. How this vacancy is to be explained we do not know. Even the year preceding it, the entire consular term of L. Paullus and C. Marcellus, is dismissed by the author of Caesar's *War in Gaul* (VIII. 48) with the meagre remark that "no Gallic affairs of any magnitude of operation had been performed: consequently that no matter of importance had occurred that might be considered worthy of mention." The same dearth of noteworthy facts may have pre-

vailed in 49 B. C., or, more probably, the notes destroyed. But however that may be, the prospectus of this period appears like this:—

A.U.C.	Consuls.	Nab.	J.P. or B.C.
702	Serv. Sulpicius Rufus; M. Claud. Marcellus	697 ¹	4663 — 51
703	L. Aemil. Paullus; C. Claudius Marcellus	698 ²	4664 — 50
704		699 ³	4665 — 49
705	C. Claudius Marcellus; L. Corn. Lentulus Crus	700 ⁴	4666 — 48
706	C. Julius Caesar II.; P. Ser. Vatia Isauricus	701 ⁵	4667 — 47

Since one of the first acts of the victorious consul, Julius Caesar, after the battle of Pharsalia in 706 A. U. C., was to settle Cleopatra on the throne of Egypt, and this was done *after* the first of Thoth, Nab. 701, or September fourth, 48 B. C., it is correctly recorded as an incident of the fifth year of Cleopatra, having ruled four years conjointly with her brother, Ptolemy Dionysius, who, by the way, was drowned in the Nile about the same time. As the *Alexandrian Chronicle* ascribes to Julius Caesar a minimum of five years of supreme power, and to Augustus a maximum of fifty-six, making the total of the two reigns ($5+56=$) 61 years, it is clear that the five years attributed to the former must be computed from his victory at Pharsalia ($61-13=$ 48 B. C.) to the time of his death, while the fifty-six of the latter must be reckoned from his arrival in Rome or his victory at Mutina to his life's termination in 14 A. D. ($56-14=$ 42 B. C.) This length of supreme domination over Roman affairs by both Julius Caesar and Augustus is corroborated by the testimony of historians who ascribe to the conqueror of Pompey the Great an absolute reign or dictatorship of "three years and six months (or seven months)," as Josephus gives it (*Ant. B. XIV. C. XI. §2* and *Wars I. XI*), computing the time from its creation to its tragic end, that is to say, from his first annual dictatorship to his assassination. But, however the absolute rule of Julius Caesar may be computed, the five years demanded by the total of the two Caesars' imperial power ($5+56=$ 61, i.e. 47 B. C. to 14 A. D.), are noted as follows:

A.U.C.	Olymp.	Consuls and Dictator	Nab.	J.P. or B.
706	183 ²	{C. Jul. Caes. II. Dict. I; M. Antonius, Mag. Eq.		
Eodem anno	183 ³	{Fufius Calenus; P. Vatinius	702 ⁶	4668
707	183 ⁴	C. Jul. Caesar III; M. Aemilius Lepidus	703 ⁷	4669
708	184 ¹	C. Jul. Caesar IIII. Dict. II; M. Aimil Lepidus Mag. Eq.	704 ⁸	4670
709	184 ²	C. Jul. Caes. V. Dict. III; M. Antonius Mag. Eq.	705 ⁹	4671
710	184 ³ ₄	C. Jul. Caes. VI. Dict. IIII; C. Vibius Pansa; A. Hirtius	706 ¹⁰	4672

It will be noticed at once that the second consulate in this list, that of Fufius Calenus and Publius Vatinius is dated "eodem anno." At the same time it will be noted that this was the "last" year of confusion, or the "long year," of which the extraordinary length of 445 days made it appear like two years instead of one. That this misleading consulate was only part of the year 706 A. U. C., will appear upon a moment's reflection. For one thing, these consuls cannot well be simply omitted, for leaving them out is like eliminating the ninety days' intercalation from the "last" or "long" year of confusion—both are needed to effect the reform of the Roman calendar. Now this form was executed by Caesar's orders in 47–46 B. C.—twenty-three days in the February of that almost doubly long year of 706 A. U. C. falling actually in J. P. 4667 or 47 B. C., and 67 days of the ninety in two intercalary months between November and December in J. P. 4668 or 46 B. C. So, if, in the second place, the Julian year 4668 or 46 B. C. was, as all chronologists admit, the principal year of correction, and not 45 B. C., then Censorinus, that unquestionably great chronographer of old, was right when he said that Caesar's reformed calendar began 283 years before the day when he wrote his book ($45 + 238 = 283$), but wrong when he said that "the Julian years begin from the *fourth* consulship of Caesar," assuming that the calendar reform was executed "in the year of his *third* consulship with Marcus Aemilius Lepidus." The *third* consulship of Julius Caesar is indissolubly connected with the 707th year of the Capitoline reckoning of A. U. C. years, as his *fourth* is bound up with 708 A. U. C.; his *fifth* with the latter half of 709, and his *sixth* and last with the first three months of 710, of which the remainder went to Pausa and Hirtius, and after their extinction, to Octavianus and Pedius. Being thus documented and monumented by the official marbles, it cannot well be conceived that they should be wrong and a belated chronographer right, in the emplacement of consulates at this critical period. But if, on the other hand, Censorinus were right in saying that Caesar effected his calendar reform "when he was Pontifex Maximus, in the year of his *third* consulship with Marcus Aemilius Lepidus," then he would be all wrong in fixing the date of the Julian Calendar Era, for then its age would be ($44 + 238 =$) 282 years instead of 283. So the case is not one of choice or preference. The official count of the Julian years as well as the official enumeration of the A. U. C. years on the Capitoline Marbles are both in favor of J. P. 4668 or 46 B. C. as the great year of Confusion, and of J. P. 4669 or 45 B. C. as the first year of Caesar's reformed calendar.

To rehearse the facts in connection with the publicly approved figures of the Fasti Consulares, it may be observed that

the Capitoline Tables connote, first, the fact that Caesar was voted his third dictatorship in and during the same year in which Fabius and Pedius, two of his successful generals, were granted a triumph, and, secondly, the figures designating the number of the year when this happened according to its own official count, namely, the 708th year from the foundation of the city. The records of these triumphs are as follows:—

Q. Fabilis Q. F. Q. N. Maximus Cos. ex Hispania An. DCCVIII. III. Idus. Octobr.

Q. Pedius M. F. Pro Cos. ex Hispania An DCCVIII. Idib. Dec. Being thus expressly and unequivocally united by the triumphal dates of the same year, it is clear that this is a date which cannot be transposed or transmuted to suit an ancient theory or support a special scheme. The third dictatorship being voted to Caesar for the next year in the closing months of 708 A. U. C. (according to Sigonius, Clinton, Jarvis, Totten, and others), it follows that the succeeding consulate, combined with his perpetual dictatorship, must logically have been in 709, as no doubt engraved in the marble, though now in a mutilated and scarcely legible state. And, closing the last, but not the least, of the consulates comprehended in this section, the year beginning with January, 42 B. C., is capped with the name and title of Julius Caesar as consul for the *sixth* time (VI.) and dictator for life (IIII.), with C. Vibius Pansa and A. Hirtius as consules suffecti, in 710 A. U. C., again expressed in Roman figures—DCCX—and, like the other dates, engraved in marble for an everlasting memorial of a great, never-to-be-forgotten event.

The great event especially appropriated to this year A. U. C. 709–10, of which the very name and title suggest the fact, is the untimely death of the great emperor and dictator, C. Julius Caesar. This is indicated by a note anent the ninth year of Cleopatra (in the *Chronicon* of Eusebius p. 260, see Clinton's *F. H.*, III, p. vii), which determines the death of Caesar to the ides of March in the fourth year of the Reformed Calendar, ergo in J. P. 4672 or 42 B. C., in the 706th year of the Nabonassan Era, and in the year of Rome 709 (if reckoned from April to April) or the 710th (if computed from January to December.) The former mode of reckoning is intimated by Eutropius, who, in his *Compendium of Roman History* (B. VII. C. 1), says: "After the assassination of Caesar, in about the *seven hundred and ninth* year of the city, the civil wars were renewed." The latter form of reckoning, involving the 710th year of the City, is necessitated by a note anent the tenth year of Cleopatra's sovereignty, which began at the end of March or the beginning of April, and was designed to memorialize the advent of Octavius in Rome and his immediate rise to dignity and power. It is finally and effectively

fixed by an eclipse of the moon on the thirteenth of March, 42 B. C., the nearly full, but waning light of which fell on the face of Caesar's wife, Calpurnia, in the night before the fatal Ides of March, when Caesar fell, being stabbed with three and twenty wounds.

Then, what do you think of Eutropius' saying: "After the assassination of Caesar, in *about the seven hundred and ninth* year of the City, the civil wars were renewed; for the senate favored the assassins of Caesar, and Antony, the consul, being of Caesar's party, endeavored to crush them in a civil war. The state therefore being thrown into confusion, Antony, perpetrating many acts of violence, was declared an enemy by the senate. The two consuls, Pansa and Hirtius, were sent in pursuit of him, together with Octavianus, a youth of eighteen years of age [?] . . . These three generals, therefore, marching against Antony, defeated him. It happened, however, that the two victorious consuls lost their lives; and the three armies in consequence became subject to Caesar only." Does this sound as if Julius Caesar's grand-nephew or so-called son by adoption had loitered away an entire year of twelve months, unheard of and unnoticed, before he appeared on the scene of action? Does this look as if he had slept in the shade of a tree, or twiddled his thumbs in idleness? No, indeed. What impressed the world of his day and overawed his fellow-citizens of Rome was the sardonic, diabolical audacity of his plots and the superhuman, demoniac execution of his plans. This looked more like a devil or a malign divinity at work shaping events to suit his ends, rather than the doings of a "youth of eighteen years of age." He was not eighteen, but twenty when he became, or he made himself, consul for the first time. For, as Eutropius (*Comp. R. H.*, B. VII. C. VIII.) computes, he was elected consul (I) in the twelfth year before he was styled Augustus, or rather, before he became sole ruler for forty-four years, and "thus from the beginning of his reign to the end were fifty-five years." As Augustus died in the seventy-sixth [or seventy-seventh] year of his age in 14 A. D., and commenced his sole rule of forty-four years in $(44 - 14 =) 30$ B. C., he must have commenced his consular and triumviral rule twelve years before the death of Antony and Cleopatra (or the end of the civil wars), ergo in $(30 + 12 =) 42$ B. C. But the year 42 B. C. brought with it the consulship of Pansa and Hirtius, and all the events associated with their term of office. In 42 B. C., therefore, he "forcibly procured his appointment to the consulship in his twentieth [or rather two and twentieth] year." But forty-two subtracted from 64 B. C. leaves twenty-two years as the age of the youth Octavianus, when "in conjunction with Antony and Lepidus he proscribed the senate, and proceeded to make himself master of the state by arms."

The twelve years' triumviral rule of Octavianus, corresponding to the twelve last years of Cleopatra's reign, embraced a dozen terms of consular power remarkable for their chronological contacts, which, therefore, must be now considered. As we have seen, the first of these twelve consulates coincided in the main with the tenth year of the Egyptian queen. It witnessed, too, a resumption of the count of Olympiads, if not a resuscitation of the Olympic games; for this is expressly noted by Cicero (*Ep. Att.* XVI. 7). It was, in the third place, the year in which, on the twenty-ninth day of December (IIII Kal. Jan.), a public triumph was accorded M. Aemilius Lepidus, when he had already been designated consul for the second time and had made himself one of the triumvirs on November twenty-seventh (V. K. Dec.), consequently in the second last month of the year preceding his own consulate in A. U. C. 711 or 41 B. C., and antedating the end of the first five year term of the new Triumvirate in December thirty-first, 715 A. U. C. by exactly five years, one month and five days. Thus it is certain that the one year which witnessed the assassination of Julius Caesar, on March fifteenth, the coming of Octavianus to Rome and his self-appointment to the consulate, the battle of Mutina (April fifteenth), his induction into the consulate by military force, the birth of Tiberius, on August nineteenth, sixteen according to some, in the consulship of Pansa and Hirtius, and the creation of the Second Triumvirate on the twenty-seventh of November, was no other than the 706th year of the Nabonassan Era and the 4672nd year of the Julian Period or the forty-second year before the beginning of the common Christian Era.

This year, then, being enumerated as the 710th A. U. C., having seen, in that part of the natural year which might be construed as the close of 709 A. U. C., the abrupt termination of Julius Caesar's five-year rule, ushered in the twelve years' triumviral rule of Octavianus, upon which followed the Era of Augustus with its initial count of forty-three years for the canonical reign of Augustus. The balance of the year, which opened up under the consular title of C. Julius Caesar VI and M. Antonius, passed under the nominal superscription of the substitute consuls, the suffecti, Pansa and Hirtius, although both were slain or assassinated in the battle of Mutina. It continued as the 710th year A. U. C. to its immensely momentous close when the first term of the Second Triumvirate, to end on the sixth "last day of December," was begun on the twenty-seventh of November. The *first* "thirty-first of December" was the last day of 710 A. U. C. or J. P. 4672 (42 B. C.). The *sixth* "last of December" was December thirty-first, 715 A. U. C. or J. P. 4677 (37 B. C.). The tenth "last of December" was December thirty-first, 720

A. U. C. or J. P. 4681 (33 B. C.), and the twelfth "last of December" was the thirty-first day of the twelfth month of A. U. C. 722 or J. P. 4683 (31 B. C.). This brings us to the very threshold of the Augustan Era, with which begins the all-Roman domination of Egypt, as outlined and limited by the *Canon* of Ptolemy.

With the autocratic triumviral administration of Roman affairs, alongside of the last twelve years of Cleopatra's reign in Egypt, we compare and bring to a close the consular series of the section of history not yet completely under the aegis of Roman authority. It constitutes the last dozen of the section which terminates in that one great catastrophe to Greek civilization, the overwhelming of Egypt and the Greek world in general ruin. Not a vestige was left of economic or political independence where once had been flourishing Greek principalities and powers, not excepting the diminutive kingdom of the Jews, whose preservation as a plaything and derision of Rome will be noted in a later section. The consulates, connoted as before stated, are as follows:—

<i>A. U. C. Aug. Tri.</i>			<i>Consuls</i>	<i>Nab.</i>	<i>J. P. or B. C.</i>	
710	1		C. Jul. Caesar VI and M. Antony; Pansa and Hirtius	706 ¹⁰	4672	42
711	2	1	M. Aemilius Lepidus II; L. Manatius Plancus	707 ¹¹	4673	41
712	3	2	P. Servil. Vatia Isaur. II; L. Antonius Pietas	708 ¹²	4674	40
713	4	3	Cn. Domit. Calvinus II; C. Asinius Pollio	709 ¹³	4675	39
714	5	4	L. Marcius Censorinus; C. Calvisius Sabinus	710 ¹⁴	4676	38
715	6	5	Ap. Claudius Pulcher; C. Norbanus Flaccus	711 ¹⁵	4677	37
716	7	6	M. Agrippa; L. Caninius Gallus	712 ¹⁶	4678	36
717	8	7	L. Gellius Poplicola; M. Cocceius Nerva	713 ¹⁷	4679	35
718	9	8	L. Cornificius; Sex. Pompeius	714 ¹⁸	4680	34
719	10	9	L. Scribonius Libo; M. Antonius II	715 ¹⁹	4681	33
720	11	10	C. Caesar II; L. Vocius Tullus	716 ²⁰	4682	32
721	12	11	Cn. Domit. Ahenobarbus; C. Sotius	717 ²¹	4683	31
722	13	12	C. Caesar II; M. Valer. Mess. Corvinus	718 ²²	4684	30
723	14		C. Caesar IV; M. Licinius Crassus	719 ¹	4685	29

At first sight it might seem as if the consulate first in order—that of Lepidus and Plancus—could be unhesitatingly and unalterably fixed by the age of Tiberius Caesar, since Suetonius, his biographer (*Tib.* V), says: "According to the greatest number of writers, and those, too, of the best authority, he was born at Rome, in the Palatine quarter, upon the sixteenth of the calends of December [sixteenth of November, or, at the time of the Plebeian Circension games for three days, XVII—XV, fifteenth

to seventeenth of November], when M. Aemilius Lepidus was second time consul, with Lucius Munatius Plancus, after the battle of Philippi; for so it is registered in the calendar and in the public acts." Apparently, this would place that consulate in A. U. C. 711 or 41 B. C., but his biographer is candid enough to add: "According to some, however, he was born the preceding year, in the consulship of Hirtius and Pansa; according to others, in the year following, during the consulship of Servilius Isauricus and Antony."

No better proof could be given of the obvious existence of an error in the time-determinations of that day. Fluctuations in the count of years attained, first, by Pompey; then, by Augustus, now by Tiberius! What was the real age of Tiberius? According to Suetonius (*Tib.* LXXII) and Tacitus, Tiberius died in the seventy-eighth year of his age; according to Dion Cassius, when he was seventy-seven years, four months, and nine days old. If, then, Tiberius was born nearly seventy-eight years before the twenty-sixth of March, 37 A. D. [the date of his death], he was born in the consulate of Hirtius and Pansa, *before* the battle of Philippi, i.e., in J. P. 4672 or 42 B. C. If, on the other hand, he was born, as the public acts are said to have stated, in the consulship of Lepidus II and Plancus, he died in his seventy-seventh year, not in his seventy-eighth. And if, again, he was born in the consulship of Servilius Isauricus and Antony, he died in his seventy-sixth, not in his seventy-seventh or seventy-eighth year. There is not only a mere probability in favor of the last alternative in the correctness of the assumption that an error of two years obtains in the age of this distinguished emperor. Beside the documentary testimony of Appian's history (B. IV. c. 133) that Brutus and Cassius had used the better part of *two years* [from the day of Caesar's death] in preparing for the decisive battle of Philippi, which preceded the birth of Tiberius by only a few days, we have the monumental evidence of a plinth (or pedestal) at Puteoli, which, preserves for us, in more enduring form, the horoscope cast on the birth of this prince. In unmistakable letters, this outstanding inscription refers to the consulate of Servilius Isauricus and Antonius Pietas, which signalized the year A. U. C. 712, or J. P. 4674 (40 B. C.)

Unfortunately for the next item, the Olympic scale of years, to which the historian appeals, affords no absolutely safe guidance for the rest of this period. While it is true that the year of Caesar's assassination in 42 B. C. was noted by Cicero as an Olympic stadium year, or, at least, as a year in which the neglected games were revived, it is not so certain whether this was the 184th or the 185th Olympiad contest, or whether it was an irregular interlude or intermittent play of a series which later

was recognized by some as the legitimate succession of Olympic games. In consistency with Eusebius' list of Olympiads, some chronologists make this year the 185th of the Olympic contests. Others, with equal consistency, placing the date of the battle of Actium in the 187th Olympiad; make the year of Caesar's assassination hold the 184th. Between the two, Josephus, the Jewish historian, locates the consulate of Calvinus II and Pollio in Olympiad 184, and that of Agrippa and Gallus in Ol. 185; thus (*Antiq. B. XIV. C. XIV. §5*): "And thus did this man [Herod the Great] receive the kingdom [by the favor of Antony and Caesar Octavianus], having obtained it on the hundred and eighty-fourth Olympiad, when Caius Domitius Calvinus was consul the second time, and Caius Asinius Pollio [the first time]." And, speaking of the actual seizure of the city by Herod with its attendant spoliation by his allies, the same author says (*Antiq. B. XIV. C. XVI. §4*): "This destruction befell the city of Jerusalem when Marcus Agrippa and Caninius Gallus were consuls at Rome, on the hundred and eighty-fifth Olympiad," etcetera. Yet, according to the regular, legitimate reckoning of Olympiadic years, the former might have been the 185th Olympiad, the latter the 186th. We must therefore, determine the dates of these two important events (of the *de jure* and the *de facto* beginnings of Herod's reign) by the succession of Roman consuls.

So, by way of compensation, as it were, for the failure of the Olympiads to bear us out, we here introduce the triumviral count of five years in addition to the official regimentation of consular terms by the Capitoline Marbles. By the actual happenings of history, the first quinquennium of the Second Triumvirate expired with the close of the second consulate intervening between the two beginnings of Herod's regal capacity (*de jure* and *de facto*), and, in the same consulship of M. Agrippa and L. Caninius Gallus it was, too, that a renewal of the triumvirate was concluded and the decree regarding the kingship of Judea was put into effect by force. The consulship with which the triumvirs concluded their first term of administration was officially connoted on the Capitoline Marbles as the 715th year of the City, and the year immediately succeeding the consulship in which Jerusalem was captured, was marked by the Capitoline Tables the 717th. It follows, then, as a matter of course, that the year of the capture itself was the 716th from the foundation of the city of Rome, the first of the second five-year term of the Triumvirate (J. P. 4678 or 36 B. C.), and, if we may apply the Olympiadic count, the fourth year of the regular 185th Olympiad.

Another line of verification of this period is supplied by Suetonius when he recapitulates the consulships held by Octavianus Caesar. Having forcefully possessed himself of his first

term in the year 710 A. U. C., Octavius obtained his second consulship after nine years' intermission in 720, and his third, one year intervening, in 722. It was in this most epochal, pre-eminently important *third* consulship, which was also the twelfth year of the Second Triumvirate and the last (the twenty-second) year of Cleopatra's reign, that the decisive sea fight at Actium was fought. And, being the seventh year of Herod's kingship, as Josephus says, it was also a most prominent point of contact in the chronology of King Herod's reign. It may be brought into direct connection with the approved *Astronomical Canon* and the Nabonassan Era in the following manner: $986 - 267 = 719 - 7 = 712$ Nab. Or, expressed in words, thus: Since the Egyptians considered the year in which Censorinus wrote, Nab. 986, the 267th of the Egyptian Augustan Era, because they came under the power and dominion of the Roman people under Augustus in Nab. 719, and the Jewish people counted that as the seventh year of their own subjection to Herod as king, therefore it agrees with common reasoning that the year $(719 - 7 =)712$ of the Nabonassan Era was the year in which the Idumaeen king's ill-starred dynasty began its course with the capture of the city of Jerusalem and his marriage to Mariamne, the daughter of the royal house of Judah. This seven-year period, thus canonically staked off, is composed of the following constituent parts. First, the very year of Jerusalem's capture as the first consular year of the period, the consulate of Agrippa and Gallus, in A. U. C. 716; then, the four other years of the second triumviral term, comprising the consulships of Gellius Poplicola and Cocceius Nerva, in 717 A. U. C.; of Cornificius and Pompeius in 718 A. U. C., of Scribonius Libo and Antonius II. in 719 A. U. C., and of C. Caesar Octavianus II. and Volcatius Tullus in 720 A. U. C.; then the interjacent consulate of Socius and Domitius Ahenobarbus in 721 A. U. C.; and finally the climaxing consulate of Caesar Octavius III and Val. Messala Corvinus in 722 A. U. C., in which all authorities agree the battle of Actium was fought. The period cannot have more component parts than this. There seems to be, therefore, no other alternative left for the definite dating of Herod's capture of Jerusalem. It appears to be, and is, J. P. 4678 or 36 B. C., with no other choice or preference.

The seriation of consular annals according to the Capitoline Marbles having been already determined down to the second consulate of Anthony, there remain only three consulships to make up the twelve triumviral years of Caesar, the later Augustus. These, corresponding as a matter of course, to the metropolitan years 720, 721, and 722 A. U. C., were those already mentioned in the count of king Herod's seven first years, the consulate of Caesar II and Volcatius Tullus, the consulate of Domitius

Ahenobarbus and Sosius, and the consulate of Caesar III. and Valer. Messala Corvinus. The next is the first consulate in the reign of Augustus, and rates as the 723rd year from the foundation of the city of Rome.

It may be observed, before we pass out of the world of Greek culture into the universe of Roman civilization, (or should we say, out of the school-house of provincial learning into the university of cosmopolitan science), that we should do well to impress on our minds the tremendous importance of the event which closed the period of what is known as the Third Civil War. Not to enter upon a review of the first and the second, when the most powerful armies the world had ever seen fought against each other and millions of men of Roman blood were slaughtered by men of Roman blood, the Third Civil War is estimated by Livy, (in the outline of his CXXXIII. book) as having lasted one and twenty years. For no sooner had the pierced body of Julius Caesar struck the pavement of the senate house than Anthony and Octavius began the systematic extirpation of the assassins of Caesar which developed into the Third Civil War; nor did they cease until this war of ruthless extermination had overtaken the last of the conspirators in that part of that year in which the son of Cicero was consul, 723 A. U. C. or 29 B. C. From the consulate of Marcellus and Lentulus, when the Civil War broke out (48 B. C.), to the consulate of Caesar Octavianus III. and Messala Corvinus, when the battle of Actium decided the war for Caesar (in 30 B. C.), is indeed but nineteen years, as computed by Paterculus (B. II. C. LXXXIX), but if the final exit of Anthony be included, as it ought to be, it was rather a full twenty years. Again, if we understand the phrase of Livy "altero et vigesimo anno" to refer to the crowning pomp of Caesar's triumph after Antony's death, or to the bestowal of his title on "Augustus," then his words must be taken to mean "one and twenty years," and we must adjust the conclusion of Prof. Totten as to the time intended to be recorded by Dion Cassius [*H. R.*, L. LI, §1-19]. When Dio relates that the news of decease of Antony and Cleopatra arrived at Rome "in that part of that year in which the son of Cicero was consul," he meant and intended the consulship of Caesar Octavianus IIII and M. Licinius Crassus, in the course of which, as a special substitute, he entered upon his fraction of a consulate on the thirteenth of September, consequently just two weeks after the suicide of his father's mortal enemy. But the consulate of Caesar IIII and Crassus synchronized with A. U. C. 723 or J. P. 4685 (29 B. C.), not with 31 B. C., as assumed by Prof. Totten. Therefore, too, the close of this "deplorable and execrable" Civil War period, whether computed at twenty or twenty-one years' dura-

tion, fell respectively either in the consulate of Caesar Octavianus III, and Corvinus in 30 B. C. or in the consulate of Caesar IIII and Crassus in 29 B. C. Both of these terminal dates have been adopted and employed by ancient chronographers as the beginnings of memorable eras and epochs, for both served to mark, in different ways, different people, the great transition of Egypt and other countries from Greek Macedonian domination to universal Roman rule and government.

The first new era to be established at this superlatively pivotal point [aggrouping about it the nine consecutive consulates of Caesar Augustus, from the IIIrd to the XIth], was the one styled by Censorinus, writing in 238 A. D., "the *Egyptian Augustan Years*." In reality a prochronism if supposed to mark the duration of the dignity and title of "*Augustus*," which was conferred upon Octavianus more than two years after the battle of Actium, this era is a noble standard of time when applied, as intended, to the duration of the *later Augustus* Caesar's dominion and authority over Egypt as one of Ptolemy's canonical "Roman kings." In other words, the Egyptians, in a spirit of flattery, reckoned the duration of the reign of Octavianus, conventionally or *de jure*, from his victory at Actium on September second, 30 A. D., or Thoth third, Nab. 719, or, stating it canonically, from the first of Thoth, 720 Nab., or the thirtieth of August, 29 B. C., while the name and title of "*Augustus*" dated *de facto* from the first (or seventeenth) of January, 27 B. C. Hence, the *Egyptian Augustan* years, more correctly characterized as the *Actiac* Era, may be said to have inaugurated the glorification of "Augustus" two years in advance of the rest of the world, who gave him godlike honors and attributes in the general epoch of "Augustan Years." In contra-distinction to the later cosmopolitan series of 265 years [in 238 A. D.], the *Egyptian Augustan* era began its series of 267 years [in 238 A. D.] two years before the deifying nomenclature of Caesar "Augustus" set in, consequently in [267-238=] 29 B. C., or, in terms of the native provincial era [Nab. 986-267=] 719 Nab. Accordingly, counting the year 719 as the first of the forty-three canonical years of Caesar Augustus, it was, in point of fact, an entire twelve month of suspense, pending the final decision of fate in favor of Caesar on the last day of the year, when Cleopatra's regime really ended with the termination of her life, and the rule of Caesar practically began in its absoluteness and universality on the first of Thoth, Nab. 720, or the thirtieth of August, 29 B. C. This is therefore also the beginning of the provincial *Egyptian Augustan* Era.

In order, now, to convince the fair-minded reader that this is not, as Wurm, the astronomer, wailed, "some local era, the

epoch of which can scarcely be determined" (v. Wieseler's *Synopsis*, p. 442), but a well-authenticated measure of time, based on the astronomical canon of Ptolemy and backed up by the authoritative symposium of Censorinus, we shall show how the chronological line of Actiac or Egyptian Augustan years runs consistently through three points at least between its *first* year in 29 B. C. and its last known year 267 in Nab. 986 or 238 A. D. To prove its own consistency, this line of Augustan years must run through its own thirty-sixth year, Nab. 755, which commenced on August 21, 7 A. D., and ended on August 20, 8 A. D.; its own thirty-seventh year, 756 Nab., which commenced on August twenty-first, 8 A. D., and ended on August twentieth, 9 A. D.; and its own fifty-fifth year, which began on August seventeenth, 26 A. D., and ended on August sixteenth, 27 A. D.

Referring, *first*, to the thirty-sixth year of the Levantine series of Augustan years, which were meant to commemorate the victory of Octavianus in the battle of Actium, it is joined numismatically with the fifty-fourth year of municipal autonomy granted the city of Antioch by Julius Caesar after the battle of Pharsalia. The latter action was fought in the summer of Nab. 701, so the gift and enjoyment of independence came to the city near the end of the same year, 701. The Actiac sea-fight, on the other hand, was fought on the third day of the year, near the beginning of autumn in 719 N. E. or 30 B. C., so that nearly all of the year 719, fall, winter, spring, and summer, passed, before the final deed was done which made Caesar the absolute and henceforth "august" ruler over Egypt on the last day of 719 or the first day of 720 [= Aug. 29-30, 29 B. C.]. Hence there is here an intermission of nearly twelve months between the initial arbitrament of war and the finishing settlement of peace, which must be accounted for by the addition of an extra unit. We therefore add $701 + 54 = 755$, and $718 + 1 + 36 = 755$ N. E. But 755 N. E. is equivalent to the year-period August twenty-first, 7 A. D., to August twentieth, 8 A. D.: hence it follows that the first year of this provincial Augustan series was Nab. 720, which began on the thirtieth of August, 29 B. C.

The *second* point through which the Egyptian line of Augustan years must necessarily pass in order to prove itself self-consistent and authentic, is the year thirty-seven of this series, otherwise also known as the Actiac Era. Now it looks like a matter of supererogation even to mention the next following year after the thirty-sixth, but, when it is considered that this very same "thirty-seventh year of Caesar's victory over Antony at Actium" is placed by different chronologists in very different years, some *one* year earlier, others two, some even three years earlier than

the date of Ptolemy and Censorinus, it will become increasingly clear how extremely important it is to fix the exact and correct date of both action and era. Seeing that those who place the Actiac encounter in J. P. 4683 or 31 B. C., have the greatest number of professional chronologists on their side in favor of the commonly received system, and the few sponsoring the prochronistic scheme have, for all that, a great show of learning to flaunt in the face of the uninitiated, it behooves us to do our utmost in the way of refuting the false and fortifying the true. So we proceed with demonstrating this second point as fully and effectively as possible.

That the Actiac or Egyptian Augustan years did not begin a year earlier; that is to say, in 30 B. C. instead of 29 B. C., is obvious from the fact that, in this case of beginning the series on Thoth first of Nab. 719, the death of Cleopatra and of Antony is placed before the battle of Actium, which was the cause of their suicide and the reason of commemoration. That the Augustan years, as enumerated, did not commence in Nab. 718, is also evident from the fact that this very generally received prochronism locates the deaths of Antony and Cleopatra in the twenty-first year of her reign, whereas it is known that they died by their own hands at the close of her twenty-second regnal year. And that this series of years did not take rise in Nab. 717 or 32 B. C. (still another year earlier than generally accepted) is clearly perceived from the lapse into the common error of over-estimating this section of Roman chronology by two full years. The result of this general aberration, for one thing, is the false emplacement, in Nab. 753 or 5-6 A. D., first, of the consulate of Lepidus and Arruntius, and, then, with it, of the banishment of Archelaus, the son and successor of Herod the Great. This is so obviously an error that even the author of the earlier occurrence theory, Dr. Jarvis, takes exception to the inference of Dio, the Greek historian of Rome, that the banishment of Archelaus occurred in the above-named consular term in 6 A. D. Admitting the error of Dio, but committing himself afresh to the error of the day, Dr. Jarvis makes this comment: " 'Herod of Palestine, on account of some accusation by his brethren, was sent into exile beyond the Alps, and his territory confiscated' (Dion *H. R.* lib 7v. C. 25-27) Josephus, a better authority on this particular fact, places it a year later." (*Chron. Intr.*, p. 225). But locating the incident from Jewish history two years later than commonly accepted, or three years later than claimed by the prochronistic school, locates simultaneously the dates of the battle at Actium and the inauguration of the Egyptian Augustan years that much later, viz. 717+3 or 718+2, makes the inception of the Augustan era, New Year's day, Thoth first, Nab. 720, or August thirtieth, 29 B. C.

The *third* and last point of time through which the Egyptian-Augustan line of years must pass in order to prove its own consistency and historical consequence is the fifty-fifth year, named in the famous inscription of the senate of the Jewish town of Berenice, which was situated, as Josephus tells us (*Ant.* VIII. VI. 4) on the coast of the Red Sea, and therefore under the influence of Jewish, Egyptian, and Roman culture. Addressed to the Roman official, Marcus Titius, and expressed in the language of the Greek ruling class, it is dated "in the fifty-fifth year, the twenty-fifth of Phaoph, on the day of the assembly for the Feast of Tabernacles" (see *Mus. Veron.*, p. 325); (Wieseler's *Synopsis*, p. 441). That is to say, the $[30+25=]$ 55th day of the native Nabonassan year which, counting from 32, 31, 30 or 29 B. C., began fifty-five years later, on August eighteenth in 23 A. D., and on August seventeenth in 24, 25 and 26 A. D., coincided with the twenty-second day of the Jewish month Tisri and, by computation, with the twenty-fourth day of October in 23 A. D., or the twenty-third of October in 24, 25, or 26 A. D., respectively, according to which year actually corresponded to the fifty-fifth year of the Egyptian Augustan Era.

Not willing to take advantage of the frank confession of Dr. Wieseler that "attention bestowed on this inscription by chronologists" has, "as yet, been *without due success*," or of his involuntary admission that the chronology of 32, 31, and 30 B. C. (if made to do duty as dates for the beginning of the Egyptian Augustan or Actiac Era) is all wrong, we shall set forth the calendric conditions obtaining in the fifty-fifth years posterior to the dates promulgated by the various schools of chronology together with the authentic record of history, although, in so doing, we must exercise the license of anticipating an accurate knowledge of what the Jewish calendar of those days was like. So, in order to establish the proper notes of time exhibited in the years $(55-32=)$ 23 A. D., $(55-31=)$ 24 A. D., $(55-30=)$ 25 A. D., and $(55-29=)$ 26 A. D., and in so doing prove the fitness or unfitness of the fifty-fifth year before them to unworthily pose or meritoriously serve as the initial date of the action at Actium or of the era in honor of it, we shall compute the number of days that passed between the beginning of the sacred Jewish year, Sel. 335, which began in 23 A. D., and the end of the Asmonean-Herodian era, which closed on the ninth of Ab, Sel. 382, on the sixth of August, 70 A. D.

Embracing the last nine years of the third nineteen-year cycle contained in the Vth Calippic Period, i.e. Sel. 335-343, the entire fourth nineteen-year cycle of the same Calippic, Sel. 344-362, the entire first nineteen-year cycle of the VIth Calippic Period, Sel. 363-381, and the fraction of the first year of the

second nineteen-year cycle of the same VIth Calippic Period, Nisan one to Ab nine, Sel. 382, the interval of forty-seven Seleucic years contains an aggregate of 17315 days. Subtracting this amount of Jewish calendar time from the number of days contained in the same period in terms of the Julian calendar, to wit, in the forty-seven years from January first, 23 A. D., to the sixth of August, 70 A. D., viz. 17385, we obtain the equation [85330—17315=] 68015 . . seventieth day of 23 A. D. That is to say, the Asmonean Herodian era (which contained a total of 85330 days from the twenty-fifth of Casleu, Sel. 148, or December twenty-second, 165 B. C., to the ninth of Ab. Sel. 382, or August sixth, 70 A. D.) reached the 68015th day of its own seriation on the seventieth day of 23 A. D., which in this case was, a Tuesday, the tenth of March, 23 A. D. being a leap-year (Cal. ED). Building on this basis, we add, on both sides of contemporary time-keeping, the number of days contained in each Jewish year, from the eleventh to the fourteenth year of the current cycle, Sel. 335 to 338, thus:—

	<i>Jewish</i>	<i>Julian</i>	
68015	68015 ..	70 d. in 23 A.D.	70
177	30	30	177
1	1	1	1
30	147	147	30
22	30	30	22
7)68245	147	177	
9749+2		455	300=
		—366 d. in 23 A. D.	Mon., Oct. 26, 23 A. D.
68400	68400 ..	89	89
177			177
22	354	354 d. in Sel. 336	22
7)68599		443	288=
9799+6		—365 d. in 24 A. D.	Fri., Oct. 15, 24 A. D.
68754	68754 ..	78	78
177	354	354 d. in Sel. 337	177
22			22
7)68953		432	277=
9850+3		—365 d. in 25 A. D.	Tue., Oct. 4, 25 A. D.
69108	69108 ..	67	67
177	177	177	177
30	30	30	30
22	177	177	22
7)69337		451	296=
9905+2		—365 d. in 26 A. D.	Mon., Oct. 23, 26 A. D.
	69492 ..	86	

Now, to ascertain which one, and only *one*, of these four years was the fifty-fifth in the series of Egyptian Augustan years, or years from the battle of Actium, we compare each one of them with two possible standards, according to the double mode of reckoning then in vogue, i.e. either from the *variable* commencement of the ancient Nabonassan year or from the *fixed* starting-point of the Julianized Egyptian years. According to the former, the four years Nab. 771, 772, 773 and 774 [23, 24, 25 and 26 A. D.] began their unstable course with Thoth first falling on August seventeenth and its $(30+25=)$ fifty-fifth day on the tenth of October. Consequently, to be identified as the correct historical date of the declaration of Berenice, not only the twenty-fifth of Phaoph or fifty-fifth day of the Egyptian year, but the $(177+22=)$ 199th day in an ordinary Jewish year (229th in an intercalary year, and 230th in an intercalary bissextile year) must coincide and harmonize with the 283rd day [tenth of October] of an ordinary Julianized Roman year. According to the latter and later mode of reckoning, on the other hand, from the Egyptian New Year's stabilized on the thirtieth of August, on which date the first of Thoth happened to fall in the four Nabonassan years 719, 720, 721, and 722 [29, 28, 27, and 26 B. C.], during which the stabilization of the Egyptian year [in Nab. 721 or 27 B. C.] occurred. Consequently, to be distinguished as the true and only authentic date acceptable for the beginning of the Actiac Era or the Egyptian Augustan years, the fifty-fifth year, and in fact every year of the series, must revert to the 241st day of the common Julian year in order to locate the fifty-fifth day of each standardized Nabonassan year on the 296th Julian day, or the twenty-third of October. Accordingly we must now compare the notes of time furnished by each year, 23, 24, 25 and 26 A. D., with the postulates just mentioned, in order to discover the year of identification.

A superficial survey of the situation informs us at once that the twenty-sixth of October 23 A. D. as the date of the closing session of the Jewish assembly at Berenice on the last day of the feast of Tabernacles approaches neither the tenth nor the twenty-third of October; neither does the fifteenth of October in the year 24 A. D., if held to be the day of the convocation, come any way near the double Julian date of the Egyptian (Paophi 25); still less does the convention, if held on October fourth, in 25 A. D., approximate the dates of assembly according to the Julian or the Egyptian calendars. In every one of these three alleged "fifty-fifth" years does the synchronization of dates shoot wide of the mark: they all fail to harmonize. The only year which not merely approximates, but absolutely punctures the bull's eye of identity required by the inscription at Berenice, is the year

26 A. D. In this case, the Alexandrine commencement of the Augustan era from the fixed starting-point on August thirtieth is not only distinguished and signalized as the historic mode of reckoning this particular era, but is clearly and unmistakably demonstrated to be bound up in this grand consolidation of dates, according to which the fifty-fifth day of the Egyptian year, Phaoph twenty-fifth, is synchronized with the twenty-second of Tisri of the Jewish calendar as well as with the twenty-third of October of the Julianized Roman almanac.

Whereas then this splendid symposium of dates takes place and could take place, only in the year 26 A. D., with which the fifty-fifth year of the Augustan Era and the 338th of the Seleucic Era was coincident, it follows as a matter of common consistent reckoning that the inaugural year of the Augustan Era fifty-five years before 26 A. D. began in 29 B. C. However prevalent and almost universally accepted the year 31 B. C. may be for the date of the battle of Actium or the inauguration of the Egyptian Augustan Era, it is no more compatible with the postulated notes of time inherent in the true historical date than the year before it or the year immediately after it. No date for this epoch is correct but the date indicated in Ptolemy's *Astronomical Canon* and Censorinus' magnificent crystallization of dates, Thoth first, Nab. 720, or August thirtieth, 29 B. C.

The second era originating near this point, in the cluster of nine successive consulates conferred on Octavianus Caesar, was the catholic or cosmopolitan series of years denominated, in a general way, "the Augustan." These years, being strictly coeval with the practice of calling Octavianus "Augustus," took rise in the beginning of 27 B. C. As we shall have opportunity to refer to them, but have no particular occasion to make use of them, as we had in the preceding order, we shall dismiss the further consideration of this era and proceed with the concatenation of consulats.

Returning to the cluster of consulats grouped about the starting-point of the Augustan Era, we find ourselves again at what Prof. Totten felicitously and truly calls "the Focus of History." Devoted as they were to the re-establishment of peace throughout the world, they were not only high-lights in the interest of human welfare, but were concentration points for the best efforts for peace on earth and goodwill among men. In the second consulate after the battle of Actium, known as that of Caesar V. and Sex. Appuleius, the temple of Janus was ordered shut for the third time in the history of the Roman people. No wonder the whole world was frantic with delight. "There is no good which men can desire of the gods," says Velleius Paterculus (*C. R. H.*, B. II. C. XXXIX), "none that the gods can bestow on

men, none that can be conceived in wishes, none that can be comprised in perfect good fortune, which Augustus on his return did not realize to the state, to the Roman people, and to the world. The civil wars, which had lasted [over] twenty years, were ended, foreign wars were suppressed, peace was recalled," etcetera. After a period of 208 years of warfare, the temple of Janus was closed, and a triple triumph decreed in Caesar's honor: first day for successful campaigns in Dalmatia and Illyria; second day for the decisive victory in the sea fight at Actium; and on the third day for his acquisition of Alexandria and all of Cleopatra's possessions. Yet this was not all the glory his victory brought Caesar.

Out of the general cataclysm of ruin and destruction, as the Greek-speaking populations of countries on the Eastern coasts of the Mediterranean regarded the disaster at Actium, arose the Golden Age of Roman Supremacy over all the then-known world. In the first place, since Caesar chose, instead of using his immense power, like old Marius, to wreak vengeance and unbridled violence on his former antagonists, to restrain his hand and to show a face shining with benignity and loving-kindness to his fellow-men, (like another who had the power to destroy both soul and body in hell, but emptied himself, and took upon him the form of a servant), he was given a name such as had never been given to a human being—"the Awful," Augustus. So overwhelming in extent and intensity had been the terror of the one-time terrible Octavianus Caesar that men had stood in awe of him as of a god. But now, now that he had become undisputed master of the world, he displayed a metamorphosis of disposition and conduct so amazing, so imposing, so awe-inspiring that men by common consent as well as by legislative enactment decided to give him a name that should be above every name, that at the name of Augustus every knee should bow, as to a superman, a divinity, a veritable god. The decree of the senate giving sanction to this lofty title is preserved by Macrobius. The people, accordingly, worshipped him as *divus*, and created a new mode of time-keeping beginning with his deification. On the seventeenth of January, in the consulate famed as that of Caesar VI. and Agrippa II., the senate and people of Rome, in solemn conclave assembled, applied to him, the divinity name and attribute of "Augustus." On the authority of Censorinus, this apotheosis of Caesar is generally placed in the consulship of Caesar VII and Agrippa III, but his figures point to the present year which is expressly designated by Cassiodorus as the *sixth* (not *seventh*). Speaking of the Augustan years as used conventionally by citizens and subjects of Rome, Censorinus remarks: "Of those years which are called Augustan, the 265th, commencing also with the

first of January, although the Emperor Caesar, the son of God, on the motion of L. Munatius Plancus received the title of Augustus from the senate and the rest of the citizens on the sixteenth before the calends of February (= January seventeenth) in the year *when he the seventh time, and M. Vipsanius Agrippa the third, were consuls*. But the Egyptians consider this as the 267th of the Augustan [Actiac] years, because they came under the power and dominion of the Roman people two years before." But $265 - 238 = 27$ B. C., and two years after the battle of Actium or even the investment of Alexandria is 27 B. C. (not 26 B. C.). The consulate therefore in which Octavianus was deified and declared "Augustus" was the *third* after the Actiac term of Caesar III and Corvinus; in A. U. C. 722 or J. P. 4684 or (30 B. C.) the *second* after the epochal date of Actiac computation in the year of Caesar IV. and Crassus A. U. C. 723 or J. P. 4685 (29 B. C.); and the *next* after the third closing of the temple of Janus and the triple triumph over the gain of Dalmatia, Actium, and Alexandria in the consulate of Caesar V and Apuleius A. U. C. 724 or J. P. 4686 (= 28 B. C.). It is also the same which is expressly enumerated on the Capitoline Marbles as the 725th year from the foundation of Rome, and which is signalized by the re-establishment of the census and lustrum after an intermission of forty-two years.

After a lapse of more than forty-two years (taking into account the great intercalations of the long year of confusion), Augustus enjoyed the credit of reviving the custom of celebrating a census and lustrum. It had been a strictly quinquennial affair, until it gradually slid into desuetude in the consulate of Cn. Pompeius Magnus and M. Licinius Crassus in 70 B. C. Forty-two and a quarter years after this [J. P. 4644 or 70 B. C.] takes us to 27 B. C. [$70 - 43 = 27$], the present consulate, which is further riveted to its place by the *Chronicle* of Eusebius. This famous chronological work makes this consulate equivalent with the eighteenth year of Caesar Augustus, counting from the year of his uncle's murder, but the edition of Hieronymus, in contradiction to the Armenian copy, makes it the sixteenth, counting from the rise of Octavius to consular and triumviral power. Besides it was marked the 725th year A. U. C. in the Capitoline record commemorating the triumph of M. Licinius Crassus on the IV. Non. Jul. A. U. C. 725, which was the fourth of July, J. P. 4687 or 27 B. C.

Like the foregoing year, the following is expressly noted as the 726th year of the City. It is entitled the consulate of Caesar Augustus VII. and M. Vipsanius Agrippa III., and is to be marked as the last year of the fourth Calippic Period. Counting from J. P. 4384 or 330 B. C., when this innovation of Calippus was

first employed, four times its whole duration ($4 \times 76 = 304$ years) will bring us to the present year [$43834 + 304 =$] J. P. 4687-8 or [$330 - 304 =$] 26 B. C., when both the Syro-Macedonian (or Jewish) Calendar, based on the famous Calippic Period, and the Egyptian (Coptic) Calendar, based on the Nabonassan system, were sought to be legislated out of existence. We say advisedly by "legislated," because they were not "outlawed" in fact, or ruled out of the daily life of the people. They were popularized, while the new orders were officialized, so that, from here on, we have the perplexing spectacle of having three or four calendric systems to observe where formerly there were only two. The construction and characteristics of the Calippic Period we shall inquire into when we come to consider the era of the Seleucidae. The change in the Egyptian Calendar may be briefly explained as the Julianization of the Nabonassan system. By changing the *vague* Egyptian years into perfect Julian years at this particular time, when the Nabonassan New Year's day for the first time fell back on August twenty-ninth, it was expected that its *first day* of Thoth would be held forever after at the twenty-ninth of August, the anniversary of Cleopatra's death. Four years before this the first of Thoth or new year's day of the Egyptian year had fallen on August thirtieth, and this was, historically, the true Egyptian inauguration day of Octavianus (or Augustus) as sole ruler of the Romanized world.

The next consular term, that of C. Caesar Augustus VIII. and T. Statilius Taurus, affords no particular chronological data outside of its one meritorious feature that it is distinctly designated in the *Fasti Capitolini* as the 727th year from the foundation of the city. We may therefore pass on to the next.

The outstanding event of this year, which may be hailed as the 728th year A. U. C., when C. Caesar Augustus IX and M. Junius Silanus were consuls, was the second closing of the temple of Janus. After a well-nigh five years' interruption by the war in Spain, the war-god's shrine was closed again. It may have been these developments which led to certain transactions in Palestine. Being an ardent admirer of a pre-eminently successful man as well as a grateful beneficiary of the successful Caesar's favor, Herod, upon hearing of his victorious campaign in Spain, resolved to honor him in a pretentious and permanent manner. We are told by Herod's historian (Josephus' *Antiq.* B. XV. C. VIII. §5 and C. IX. §§1.6) that, having fortified the city [of Jerusalem] by the palace in which he lived, and by the temple which had a strong fortress by it, called Antonia, "he contrived to make Samaria a fortress for himself also against all the people, and called it Sebaste [Greek for *Augusta*]. . . He also built another fortress for the whole nation: it was of old called Strato's Tower,

but it was by him named Caesarea... Now on this very year, which was the *thirteenth* year of the reign of Herod, upon his observation of a place near the sea, which was very proper for containing a city, and was before called Strato's Tower, he set about getting a plan for a magnificent city there... The city itself was called Caesarea... So this city was thus finished in twelve years." The time of the actual building of these citadels and cities is disclosed to us by a count of Augustan years maintained in the coinage and currency system of Sebaste=Samaria. A coin struck in the last year of Commodus, most probably in the summer preceding his assassination on December thirty-first, 192 A. D., and bearing the inscription "in the 216th year of Sebaste in Syria," bears out the conclusion that Sebaste=Samaria was founded in the summer or autumn of 24 B. C. (216-192=24), which therefore was, as a matter of unlying figures, the thirteenth year of the reign of Herod.

We shall close this section of the imperial reign of Augustus with a list of the consulates from the deaths of Antony and Cleopatra to Caesar's endowment with tribunitian power for life. Connoting this last consulship of Caesar Augustus X and Norbanus Flaccus as the twentieth year of Augustus, according to Eusebius, we register the same thus:

<i>A.U.C. Aug.</i>		<i>Consuls</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>	
724	15	C. Caesar Augustus V; Sex. Appuleius	720 ²	4686	28
725	16	C. Caesar Augustus VI; M. Agrippa II.	721 ³	4687	27
726	17	C. Caesar Augustus VII; M. Agrippa III.	722 ⁴	4688	26
727	18	C. Caesar Augustus VIII; T. Statilius Taurus	723 ⁵	4689	25
728	19	C. Caesar Augustus IX; M. Junius Silanus	724 ⁶	4690	24
729	20	C. Caesar Augustus X; C. Norbanus Flaccus	725 ⁷	4691	23

With the eleventh consulship of Caesar Augustus we enter upon a section of Roman civil chronology which is so frequently punctured and spiked with references to the years of his tribunitian authority (conferred upon him in this consulate), to the Augustan years (according to Eusebius) from his first assumption of consular power, and to the age of himself and other great men, that it seems entirely supererogatory to pursue each and everyone of these allusions to a standstill. Yet we aim at solidarity, and so we intend, from this point on, to add the references of historians and chroniclers to the tribunitian years of Caesar Augustus to the chronological lines already drawn. The date from which they properly originate was the twenty-seventh of June (V. Kal. Jul.), J. P. 4692 or 22 B. C., and therefore they run almost coextensively and conterminously with the years of the Olympiads, which also may be resumed in this section. We follow up this eleventh consulship of Caesar with that of M. Claudius Marcellus and L. Arruntius (J. P. 4693 or 21 B. C.), and that with the consulship of M. Lollius and Q. Aemilius Lepidus (J. P. 4694 or 20 B. C.).

This latter administration is variously and emphatically referred to. In the first place, it is timed as beginning in the winter, January first, J. P. 4694 or 20 B. C., of the second year of Augustus Caesar's tribunitial dignity for life by the *Fasti Capitolini*. In the second place, it is ranked and regimented by the *Capitoline Marbles* as the 732nd year from the foundation of the City. In the third place, it is the year in which Augustus wintered at Samos, this being partly the seventeenth regnal year of Herod and the time when Caesar came into Syria (20–19 B. C.). Finally it is the year immortalized by Horace as the 44th year of his life, seeing that he named December as the month of his birth and Lollius and Lepidus as the consuls of the year. The date is therefore worthy of verification. If, then, Horatius Flaccus was born, as he himself and others testify, in the consulship of L. Aurelius Cotta and L. Manlius Torquatus in 688 A. U. C. or 65 B. C., ($4 \times 11 =$) forty-four years from December eighth, 65 B. C., would take us only to the threshold of 20 B. C., but not into it. If, however, we make allowance for the omissions and discrepancies due to intercalations in excess of his reckoning, we shall find the same aberration of two years in the age of Horace that we find in the lives of other men of that day. Horace ignored the year of Confusion and other errors.

During the following consulship of M. Appuleius and P. Silius Nerva, 733 A. U. C. or 19 B. C., Augustus spent a second winter at Samos and afforded Herod an opportunity, "*when he had already reigned seventeen years,*" to meet him at Antioch in Syria and to have him settle the grievances of Zenodorus and the Trachonites. The outcome of the hearing was that Caesar bestowed on Herod all the country that lay between Trachon and Galilee, and contained Ulatha and Paneas; and on the part of Herod, that, "when he had conducted Caesar to the sea, and was returned home, he built him a most beautiful temple, of the whitest stone in Zenodorus's country, near the place called Panium. . . Herod adorned this place, which was already a very remarkable one, still farther by the erection of this temple, which he dedicated to Caesar." (*Antiq.*, B. XV. C. X. §§1–3).

"And now" [in the closing days of this consulate, probably on Dedication-day in December, J. P. 4695 or 19 B. C.] "Herod, in the eighteenth year of his reign [extending from the summer of 19 B. C. to the summer of 18 B. C.], and after the acts already mentioned, undertook a very great work, that is, to build of himself the temple of God." (C. XI. §1) Indeed he did not begin operations at once, but stayed the work of building until all preparations were completed. Then, when everything was well under way, about Pentecost in the next Julian year, but still in the eighteenth regnal year of Herod, he began to build.

The consulate in which Herod began active construction work on the inner shrine of the temple (not the large edifice which served as an enclosure for the Holy of Holies), was famous as the home-coming year of Caesar Augustus; was graced by a triumph accorded to L. Cornelius Balbus; and was officially enumerated in the Capitoline computation as 734 A. U. C. The consulate in which the Holy House was completed ("*in a year and six months*") was popularly known as that of the two Lentuli, and was publicly recorded as that of P. Cornelius Lentulus and Cn. Cornelius Lentulus. The closing terminal of this first construction period in the operations about the Temple should be particularly noted and remembered. It was the anniversary of the Dedication-day inaugurated by the Maccabees, and was therefore celebrated with especial pomp and ceremony. But what made the festival this year pre-eminently illustrious was a remarkably happy coincidence; "for at the same time with this celebration for the work about the temple, fell also the day of the king's inauguration, which he kept of an old custom as a festival, and it now coincided with the other." (Jos. *Ant. B.* XV. C. XI. §§5.6)

This date is so important for the determination of the lifetime of Jesus Christ and the stabilization of Easter that we shall reproduce its setting here in its consular and other chronological surroundings, thus:

A.U.C. Trib. Aug. Olymp.				Consuls.	Nab. J.P. or B.C.	
730	1	21	189 ³	C. Caesar Aug. XI.; A. Terrentius Varro Murena	726 ³	4692
731	2	22	189 ⁴	M. Claudius Marcellus; L. Arruntius	727 ⁹	4693
732	3	23	190 ¹	M. Lollius; Q. Aemilius Lepidus	728 ¹⁰	4694
733	4	24	190 ²	M. Appuleius; P. Silius Nerva	729 ¹¹	4695
734	5	25	190 ³	C. Sentius Saturninus; Q. Lucretius	730 ¹²	4696

The consulate which follows the next presents a little problem, in that it is described by Pliny, the naturalist, as that of "C. Furnius and C. Junius Silanus *in the year 737.*" If measured by a thoroughly authenticated scale; like the Nabonassan Era, and not by a hypothetical or theoretical tape which, up to date, had not been meted out, as the Varronian computation then was, the number should of right be 736 A. U. C. For, being the fourteenth year of Augustus by Ptolemy's *Canon* and in consistent agreement with the Capitoline count, the fourteenth consulate under Caesar's sole rule according to the *Canon*, or the twenty-seventh year of his total reign according to Jerome, must necessarily be accounted the 736th. Besides, we find that, if we count from a later date, say from the consulship of Claudius IV. and Vitellius III., when the Secular Games were again solemnized, the interval between this and that, that is to say, between Nab. 732 or 16 B. C. and Nab. 794 or 47 A. D., was not sixty-three,

but sixty-two solid years. ($794 - 732 = 62!$). But then, if the whole distance of time was "not more than" sixty-two years, then Pliny blundered in applying the Varronian abortion to this consulate, as also did Tacitus in designating the term of Claudius IV and Vitellius III. the 800th year from the building of the City. The truth appears to be that somehow or somewhere in the space between the two secular games a consular year was dropped or a number lapsed from the calculation, and the serial number of the former under Augustus was the 736th, while that of the latter under Claudius was the 798th year A. U. C., both in accordance with the Capitoline count, if it was still in use at this late date.

It is a noteworthy fact, and to us a very deplorable one, that for the entire residue of the reign of Augustus, and for the whole of all succeeding reigns, there is not discoverable a single time-determination by means of the Capitoline computation, unless the dates displayed by Frontinus (*De Aquae Ductibus Urbis Romae*) are of that order. We shall examine these data later, but we may note in advance that the effect of this landslide in chronology would not be, as misunderstood and misapplied by the anachronistic school, to elevate the niveau of events in history for a distance of centuries or for all time past, but to lower the figures denoting the passage of time by two. In other words, the Capitoline computation of the Roman Era, which before this lapse, was everywhere one year behind the date of Varro (as apologetically noted by Clinton hundreds of times), should thereafter be marked) Varro minus two), and would, in that case, harmonize with Cato, Dionysius, and Livy, if such dates of Cato, and the rest could be found.

While we sorely miss the official guidance of the Capitoline Tablets, we are somewhat compensated by the perfectly safe figures of the Eusebian Augustan years. This famous chronologist connotes that, in the twenty-eighth year of Augustus Caesar's total reign, L. Domitius Ahenobarbus and P. Cornelius Scipio were consuls for the year, scil. 737 A. U. C. Not being otherwise marked by any special chronological character, we add to the list the consulate of M. Livius Drusus Libo and L. Calpurnius Piso as that of 738 A. U. C. or 14 B. C. To make good for the omission, the consulship of M. Licinius Crassus and Cn. Cornelius Lentulus Augur is defined by an inscription *ad calcem Sueton.* No. III. as the tenth year of Augustus Caesar's tribunitian power, and that of Tib. Claudius Nero and P. Quinctilius Varus, by the *Chronicle* of Eusebius, as the thirty-first year of his total reign. These must therefore belong to 739 and 740 A. U. C. or 13 and 12 B. C. In the same manner, the consulship of M. Valerius Messala and P. Sulpicius Quirinus is left undefined, but that of Q. Aelius Tubero and Paullus Fabius Maximus is defi-

nitely scored as the thirty-third year of Caesar's government. This registers the couplet as 741 and 742 A. U. C. and matches them with J. P. 4703 or 11 B. C. and J. P. 4704 or 10 B. C.

The next succeeding consulate makes up for what the foregoing lacked in the way of furnishing chronological factors for the computation of this period. This illustrious consulship, engraved on a monument and inscribed in the documents of history, is blazoned forth as that in which the later emperor, Tib. *Claudius* Drusus Caesar, was born on the first day or Kalends of August. He is said, by Suetonius (*Claud. C. 2*), to have attained the sixty-fourth year of his age when he died, but this is two years in excess of the truth. The name and title of the consulship in which Claudius was born was that of Julius Antonius and Fabius Africanus. The date or point of time at which these consuls served was not expressed in the terms of anyone of the great chronological eras, but it is defined in ways quite as unequivocal. Not only does the planetary configuration contained in the horoscope of Claudius (see Dr. Seyffarth's *Summary*) point to the year J. P. 4705 or 9 B. C., as the consular term of Julius Antonius and Fabius Africanus during which the future emperor Claudius was born, but the spotlight of three distinct lines of calculation is thrown in full brilliance on this consulate. In the first place, it is focussed as the starting-point of the fourteenth year of the tribunitian power of Augustus, which commenced V. Kal. Jul. or twenty-seventh of June, J. P. 4705 or 9 B. C. and ended on June twenty-sixth, J. P. 4706 or 8 B. C. In the second place, it is focussed as the site of the thirty-fourth year of Caesar's ascendancy, counting from the time of his first consulate. In the third place, it is focussed as the goal of realization of Herod's twenty-eighth year as king of Judea, figuring his actual reign to have begun at Pentecost with the capture of Jerusalem in J. P. 4678 or 36 B. C. All three of these highlights concenter on the middle of this consulate like the midsummer sun on the midst of these Mediterranean coastlands. These beams of testimony can only then converge on the consulship of Julius Antonius and Fabius Africanus when it is identified with the year 743 A. U. C. according to the Capitoline count or in the Julian year J. P. 4705 or 9 B. C.

In this momentous administration of Julius Antonius and Fabius Africanus (9 B. C.) two magnitudinous building operations of king Herod also matured. In the first place, the second construction period, that of eight years, in his work on the temple cloisters and outer enclosures was now finished ($B. C. 18 - 1\frac{1}{2} = 16\frac{1}{2} - 8 = 9 - 8 B. C.$), and the third construction period began, which continued for 72 years longer ($B. C. + 8 A. D. = 64$). In the second place, "about this time it was that Caesarea

Sebaste, which he had built, was finished. The entire building being accomplished in the tenth year [or rather twelfth; comp. *Antiq. B. XV. C. IX. §6*, from the seventeenth to the twenty-eighth year] of Herod's reign, and into the hundred and ninety-second Olympiad" (*Jos., Antiq. B. XVI. C. V. §1*). All these points and lines of correlation corroborate the conclusion that this consulate is only then located where it properly can be located in the light of the evidence collected—in the Julian year J. P. 4705 or 9 B. C.

With respect to the following consulship of Nero Claudius Drusus and T. Quinctius Crispinus Volcanus, which follows in 744 A. U. C. or 8 B. C., there is, indeed, only one sidelight thrown upon it, namely, the (in itself) powerful testimony of the fifteenth year of tribunitian authority. But that was very highly significant. It signalized the solemn dedication of the Altar of Peace, which Augustus built in commemoration of the third return of universal peace during his reign and life-time. It was dedicated on the III. Kal. Feb. or January thirtieth, J. P. 4706 or 8 B. C.

And now we come to a date of the greatest chronological importance. The consulate of C. Marcus Censorinus and C. Asinius Gallus witnessed two events of prime magnitude: first, another reformation of the calendar, and second, the execution of census and lustrum. We shall take them up in their order.

The Calendar was reformed by Julius Caesar in J. P. 4668 or 46 B. C. The new ephemeris went into effect in J. P. 4669 or 45 B. C. It was supposed to be a finished product. It was not then believed to stand in need of a correction in the first year of its existence. No one thought of a reform of a reform, of an intercalation after an intercalation, and that within the short notice of less than sixty days. However, it was supposed that the call for a leap-year every fourth year meant a count of four, but strangely, of a four which included both terminals which were leap-years. The consequence was that, during the thirty-eight years now (in 8 B. C.) elapsed, there had been already twelve intercalations instead of only nine. The twelve triennial leap-years were 43, 40, 37, 34, 31, 28, 25, 22, 19, 16, 13, 10, with the thirteenth imminent within a few days. The nine quadriennial leap-years, or what should have been observed as such, were the years: 42, 38, 34, 30, 26, 22, 18, 14, 10, with the next impending leap-year due in twelve months. In order to correct the error, Augustus, in the added capacity of Pontifex Maximus, decreed that, in the next ensuing twelve years, there should be no intercalation whatever, by which drastic measure there would be no leap years in 6 B. C., 2 B. C., and 3 A. D., but there would be one in 7 A. D., and every fourth year thereafter. The effect of this arrangement was, that the almanac was reduced to such

order as obtained during the next century at least—an order such as could be obtained only at this time and by such means as were then employed. A calendric reform a year earlier would have placed the bissextile intercalations a year too soon, and a reform a year later would have necessitated a suspension of the leap-year function for twenty-four years instead of twelve, to get the seriation of leap-years into the position in which it is now.

It might be mentioned as a shady side to this bright picture that, in the effort to right the wrong, the right itself was turned awry. We could forgive the transmutation of the month "Sextilis" into the month "August," but we can scarcely condone that puerile alteration by which a day was stolen from February (already short) and superadded to August (already full), only to feed the vanity of a man already pampered and fed up on flattery.

With the calendar thus distorted and wrenched back into shape, Caesar Augustus next turned his attention to business and made a go of the census. This ecumenical or world-wide census, accomplished in the twentieth year of the Era of Augustus, had been taken under advisement and in rigorous preparation since the consulship of Tubero and Fabius in 742 A. U. C. or 10 B. C., three years before, but the lustral ceremonies were so solemnized in the present year. This was the twentieth year, not from the time when Octavius first rose to power (in 42 B. C.), but from the time when he, a dreaded demigod, received divine honors and a divinity's attribute for a name (in 27 B. C.). This census "of the whole world" deserves and, indeed demands particular attention because it is sometimes dragged into a discussion of the census by which the mother of Jesus of Nazareth was compelled to visit her native town. But it ought to be apparent that, if the lustrum which concluded a great Roman census was celebrated in this year, as stated by Augustus himself ("*quo lustrum censa sunt*" etc.), then this registration of Roman citizens, just finished and consummated, cannot very well be protracted and prolonged from one to seven years over and beyond its closing ceremonies, only to include the belated enrollment of the provincial population of Palestine. This second great census of the Roman citizenship, conducted by Augustus and by him alone, was closed in the same consular term, "*Censorino et Asinio cos.*," in which the reformed calendar, which had become so horribly deformed, was finally and effectually re-reformed. So that's the end of that!

A little peep into the future induces us to take the next three couples of consuls together. As given by Dio, Cassiodorus, and the Lapis Ancyranus, these consulships are the following: Ti. Claudius Nero II and Cn. Calpurnius Piso, C. Antistius Veter and D. Laelius Balbus, and C. Caesar Augustus XII. and L. Cornelius Sulla. The latter half of the third consulate in this

case is clearly defined as the first half of Augustus Caesar's eighteenth tribunitian year, which, beginning on June twenty-seventh, includes the New Year's day of the following consulate. But, according to the inscription *ad calcem Sueton.* No. VI, the eighteenth year of Caesar included the Kalends of January "*apsenti C. Calvisio Sabino L. Passieno Rufocoss*," Therefore the eighteenth year of tribunitian power, beginning on June twenty-seventh, 5 B. C., and ending on June twenty-sixth, 4 B. C., comprised respectively the latter and the former halves of the consulates of Caesar XII and Sulla in J. P. 4709 or 5 B. C. and of Sabinus and Rufus in J. P. 4710 or 4 B. C. But if the eighteenth year of this series began on June twenty-seventh, 5 B. C., the seventeenth began on the twenty-seventh of June, J. P. 4708 or 6 B. C., the sixteenth on June twenty-seventh, J. P. 4707 or 7 B. C., and the fifteenth of this line on June twenty-seventh, J. P. 4706 or 8 B. C. The commencement of his majesty's fifteenth year of tribunitian power, then punctuated the very middle of the consulship of Nero Claudius Drusus and T. Quinctius Crispinus Volcanus. Consequently, the sixteenth must have punctured in the same way the consulship of Censorinus and Gallus in 7 B. C., while the seventeenth bisected that of Tiberius II and Piso in the same clear and clean-cut manner. But the same seventeenth year of Augustus also halved the consulship of Antistius Veter and Laelius Balbus, if this, too, synchronized with the seventeenth year of Augustus. Two different consulates are thus said to correspond to the same tribunitian term of office. The upshot of the argument is this; that the earlier consulship of Tiberius Claudius Nero II and Cn. Calpurnius Piso must evidently be considered the regular, legitimate term of office which gave the name and title to the Roman year, while the later term of Antistius Veter and Laelius Balbus must be considered a substitute or subordinate consulship. For we know positively from Suetonius (*Tib. C. XXVI.*) that Tiberius held his second consular administration no longer than three months, and from Dion Cassius just as positively that Tiberius received the tribunitian power for five years when C. Antistius and Laelius Balbus were consuls, consequently five years before his advancement to that dignity for life, which happened, according to the *Fasti Capitolini*, in the twenty-second tribunitian year of Augustus. It follows, then, that the two consulships of Tiberius II and Piso and of Antistius and Laelius are really only one, and the seat of error in the various computations of the era of Rome is discovered here. We shall therefore conclude this section with a correct registration of its consuls.

A.U.C. Trib. Aug. Olymp.				Consuls.	Nab.	J.P. or B.C.
730	1	21	189 ³	C. Caesar Augustus XI; A. Terrent. Varro Murena	726 ³	4692 22
731	2	22	189 ⁴	M. Claudius Marcellus; L. Arruntius	727 ⁹	4693 21
732	3	23	190 ¹	M. Lollius; Q. Aemilius Lepidus	728 ¹⁰	4694 20
733	4	24	190 ²	M. Appuleius; P. Silius Nerva	729 ¹¹	4695 19
734	5	25	190 ³	C. Sentius Saturninus; Q. Lucretius	730 ¹²	4696 18
735	6	26	190 ⁴	P. Cornelius Lentulus; Cn. Corn. Lentulus	731 ¹³	4697 17
736	7	27	191 ¹	C. Furnius; C. Junius Silanus	732 ¹⁴	4698 16
737	8	28	191 ²	L. Domit. Ahenobarbus; P. Cornelius Scipio	733 ¹⁵	4699 15
738	9	29	191 ³	M. Livius Drusus Libo; L. Calpurnius Piso	734 ¹⁶	4700 14
739	10	30	191 ⁴	M. Licinius Crassus; Cn. Corn. Lentulus	735 ¹⁷	4701 13
740	11	31	192 ¹	Tiberius Claud. Nero; P. Quinctilius Varus	736 ¹⁸	4702 12
741	12	32	192 ²	M. Valerius Messala; P. Sulpicius Quirinus	737 ¹⁹	4703 11
742	13	33	192 ³	Q. Aelius Tubero; Paul. Fabius Maximus	738 ²⁰	4704 10
743	14	34	192 ⁴	Julius Antoninus; Q. Fab. Max. Africanus	739 ²¹	4705 9
744	15	35	193 ¹	Nero Claudius Drusus; T. Quinct. Crisp. Volcanus	740 ²²	4706 8
745	16	36	193 ²	C. Marcius Censorinus; C. Asinius Gallus	741 ²³	4707 7
746	17	37	193 ³	Tiberius Claud. Nero II; Cn. Calpurnius Piso	742 ²⁴	4708 6
			193 ⁴	Suff. C. Antistius Vetus; D. Laelius Balbus		
747	18	38		C. Caesar Augustus XII; L. Cornelius Sulla	743 ²⁵	4709 5

"Having now enjoyed two consulships and as many triumphs, and having been raised to an equality with Augustus in the partnership of the tribunitian power," says his historian, Velleius Paterculus (B. II. C. XCIX.), "Tiberius Nero... requested... leave of absence from his father and stepfather, that he might rest from a continual course of labours, . . . he spent *seven years at Rhodes*," etcetera, etcetera. He commenced his long vacation almost concurrently with the seventeenth tribunitian year of Caesar Augustus and his own first year of tribuneship for five years, consequently in the spring or summer of J. P. 4708 or 6 B. C., and "he returned to Rome," says Suetonius (*Tib. C. XIV*), "after an absence of nearly eight years," and, as Velleius informs us (C. CIII.), "in the consulate of Publius Vinicius," the father of his patron, M. Vinicius Quartinus. This makes his return to Rome fall in the summer or fall of J. P. 4715 or 2 A. D. The seven solid years of Tiberius, therefore, comprised both his own tribuneship of five years and Caius Caesar's designation to the consulship in five years, including the two consulships on both

ends which hedged in the rest period too securely to permit of its being shifted either back or forth. We may therefore begin the closing section of Augustus Caesar's reign with a list of these seven consulates, and, by thus disposing of them, satisfy ourselves as to the permanency of their moorings. They are these:—

<i>A.U.C. Trib. Aug. Olymp.</i>				<i>Consuls.</i>	<i>Ti's</i> <i>Re.</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>	
747	18	38	193 ⁴	C. Caes. Augustus XII.; L. Cornelius Sulla	1	743 ²⁵	4709	5
748	19	39	194 ¹	C. Calvisius Sabinus II.; L. Passienus Rufus	2	744 ²⁶	4710	4
749	20	40	194 ²	Cn. Cornelius Lentulus; M. Valer. Messalinus	3	745 ²⁷	4711	3
750	21	41	194 ³	C. Caesar Augustus XIII.; M. Plautius Sylvanus	4	746 ²⁸	4712	2
751	22	42	194 ⁴	Cn. Corn. Lentul. Cossus; L. Calpurnius Piso	5	747 ²⁹	4713	1
								A. D.
752	23	43	195 ¹	Caius Caesar; L. Aemilius Paullus	6	748 ³⁰	4714	1
753	24	44	195 ²	P. Vinicius; P. Alphinus Varus	7	749 ³¹	4715	2

The first and second of these seven consulates have been sufficiently settled to insure our utmost satisfaction. They are grooved in their places by an inscription *ad calcem* Suet. No. VI, which commemorates the eve of the New Year's day belonging to the second of these consulates, to wit, that of C. Calvisius Sabinus II and L. Passienus Rufus, being the only first of January that could happen in the eighteenth tribunitian year of Augustus. This second consular term is itself further distinguished by a similar inscription *ad calcem* Suet. No. VIII, which synchronizes the second half of the consular term with the first half of the emperor's nineteenth year of tribunitian power. To this same second consulate of Tiberius Caesar's retreat the majority of chronologists and historians refer the death of Herod, the famous or infamous king of Judea. But, since the thirty-fourth year of his reign in which, or after which, he died, did not begin before the summer or autumn of 3 B. C. and end before the summer or autumn of 2 B. C., he cannot have passed away before this thirty-fourth year had even begun. However, since we intend to go to the very bottom of this controverted question later on, we will now pass it up without further comment.

The same decision applies to the computation of the Nativity by Sulpicius (*Sacr. Hist.* II, 39), who gives it as his opinion that "Christ was born on the twenty-fifth of December when Sabinus and Rufinus were consuls." We shall see about that later.

In the consulate of Cn. Cornelius Lentulus and M. Valerius Messala, the fourth of the seven consulates during Tiberius' retirement at Rhodes, the man who bore the brunt of the first reaction against Nero's regime was born, Servius Sulpicius Galba.

According to Suetonius, he was born on the twenty-fourth of December, or seven days before the close of J. P. 4711 or 3 B. C. According to Tacitus (*Hist.* I. 27), he was slain on the fifteenth day of January, 69 A. D., when Galba himself was consul and Titus Vinius Rufinus with him. If, then, we add the two solid years and seven days (which passed before the beginning of the Christian Era) to the sixty-eight solid years and fifteen days which followed thereafter, we obtain seventy years and twenty-two days as the age of the emperor Galba. This, of course, is at variance with the results transmitted by Suetonius and Dion Cassius, but that is to be expected when even learned men compute a period of time by different and conflicting standards, as here for instance, the birth of Galba by the scheme of Cato or the Capitoline Tablets and the death of the same man by that of Varro. 821—742=72.

Referring briefly to the computation of Cassiodorus and Clemens of Alexandria, who voice it as their conviction that, "C. Lentulus and M. Messala being consuls, our Lord Jesus Christ was born in the forty-first year of the empire of Augustus" [according to Cassiodorus], "in the twenty-eighth year of Augustus" [which hieratically and in harmony with Nab. 746 reached back to August twenty-fourth, 3 B. C.], and "194 years before the death of Commodus on December thirty-first, 192 A. D. [194—192=2 B. C., therefore on the Christmas day of 3 B. C.], we must say that the date of this great event will be inquired into later on.

The fifth of the seven consulships bound up in the vacation period of Tiberius is so intimately connected with the forty-first regnal year and the twenty-eighth imperial year of Augustus that, because of the prolepsis of these calculations, it must be cursorily touched upon in advance. The consulate, in the main, was contemporary with Nab. 746, and, being entitled the consulship of Caesar Augustus XIII. and M. Plautius Sylvanus, was designated on a coin (see Norisius, *Cen. Pisan.* p. 338) "*August. pont. max. tr. pot. XXI. cos. XIII. Imp. XIV.*" It was therefore coextensive and conterminous with J. P. 4712 or 2 B. C., and overlapping halves of the forty-first and forty-second, and of the twenty-eighth and twenty-ninth, respective years of Caesar Augustus, it took in the Christmas day of the forty-second, respectively the twenty-ninth year of Augustus. Accordingly, Eusebius, Photius, Epiphanius, Zonaras, and Orosius place the Nativity in this consulate of Augustus XIII. and Plautius Sylvanus in J. P. 4712 or 2 B. C. But since this subject demands a special and exhaustive discussion, it will have to be postponed to a later date.

The sixth of the seven consulships of Tiberius' retirement

period not being particularly remarkable for chronological purposes, we pass the consular term of Cn. Cornelius Lentulus Cossus and L. Calpurnius Piso, J. P. 4713 or 1 B. C., and take up the next consulship to which Caius had been appointed five years before—that of Caius Caesar and L. Aemilius Paullus. It has been already pointed out that, on the twenty-third of September, J. P. 4714 or 1 A. D., Augustus personally believed himself to have completed the sixty-third year of his age and to be entering upon his sixty-fourth. He had, moreover, on June twenty-seventh, passed out of the twenty-second into the twenty-third year of his tribunitian authority, and also out of his forty-second into his forty-third year of political supremacy. This consular term, therefore, is strongly anchored in the 4714th year of the Julian Period or the initial year of the Christian Era. We suspend all discussion of these two years as possible dates for the Nativity for the same reason; to wit, that the subject deserves a more thorough-going discussion than can be vouchsafed to it here. It may be remarked, however, that if the great Tertullian located the Nativity *fifteen years* before the death of Augustus, he undoubtedly placed it in the year J. P. 4711 or 3 B. C.

The last of the seven complete consulships included in Tiberius' vacation at Rhodes is coincident with the latter half of the forty-third and the former half of the forty-fourth years of Augustus. It was the consulate of Velleius' father, with P. Alphinus Varus for his colleague. During this consular term it was that Tiberius' seventh year of retirement ended, and the eighth began, about a month or so before the death of Lucius, the grandson of Augustus, which occurred on the nineteenth of September (XIII. K. Octobr.), in the first half of the emperor's twenty-fourth year of tribunitian authority, consequently in J. P. 4715 or A. D. 2.

Of the next three consular administrations, that of L. Aelius Lamia and M. Servilius is said to coincide in the latter part with the twenty-fifth tribunitian year of Augustus, that of Sex. Aelius Catus and C. Sentius Saturninus with the twenty-sixth, and that of Cn. Cornelius Cinna Magnus and L. Valerius Messala Valesus with the forty-seventh year of Augustus Caesar's general years of leadership. The next term of office, however, is stressed more emphatically as the twenty-eighth tribunitian year of Augustus and the seventh tribunitian year of Tiberius, and, in addition to this, the thirty-sixth year from the battle of Actium and the fifty-fourth from the battle of Pharsalia (for so it is designated on a coin of Antioch, commemorating some event or incident of this consulship, therefore of J. P. 4719 or 6 A. D.). If a still greater weight of emphasis is desired, this may be adduced in the identification of the next year [J. P. 4720 or 7 A. D.] as the thirty-

seventh year from the battle of Actium, following up the former year without intermission. And while the next term, that of M. Furius Camillus and Sex. Non. Quintilianus, is solidly placed in J. P. 4721 or 8 A. D. on the strength of a triple score, viz. the ninth tribunitian year of Tiberius, the thirtieth year of Augustus Caesar's tribuneship, and the fiftieth year of the emperor's general ascendancy, the consulate of C. Poppaeus Sabinus and Q. Sulpicius Camerinus is placed still more overwhelmingly in J. P. 4722 or A. D. 9. It is not only signalized by the same three orders of designation which distinguished the preceding consulate, but this consulate is immortalized as the birth year of another great emperor, the founder of another imperial dynasty, the elder Vespasian. "T. Flavius Vespasianus," says Suetonius (*Vesp.* C. 2), "was born in the evening of the seventeenth of November (XV. Kal. Decembr.), in the consulship of Q. Sulpicius Camerinus and C. Poppaeus Sabinus, the fifth year before the death of Augustus." If Augustus died on the nineteenth of August (XIII. Kal. Sept.) which, in J. P. 4727 or 14 A. D., was the last day of Nab. 761, then the fifth year before this would be Nab. 757, in the first half of which would occur the seventeenth of November, J. P. 4722 or 9 A. D. And if Vespasian died in Nab. 826 or 79 A. D., "on the twenty-third of June, having lived seven months and seven days over his sixty-ninth year," then the first of his sixty-nine years of age was 757, whose "November seventeenth" fell in J. P. 4722 or 9 A. D.

A little less accentuated, but nevertheless placed beyond the shadow of a doubt, is the consulship of P. Cornelius Dolabella and M. Junius Silanus in the thirty-second tribunitian year of Augustus and the eleventh tribunitian year of Tiberius, therefore, in J. P. 4723 or 10 A. D. The following consular term of M. Aemilius Lepidus and T. Statilius Taurus, in J. P. 4724 or 11 A. D., is pointed even less, but the next, that of Germanicus Caesar and C. Fonteius Capito, is again distinguished with a special mark of identification, the fifty-fourth year of Augustus Caesar's general rule, therefore unquestionably in its proper place, J. P. 4725 or 12 A. D. To say that it was graced or even glorified by an illustrious nativity, would be saying too much, for the subject of this issue was infamous rather than famous. However that may be, according to Suetonius (*Cal.* C. 8), Caius Caesar, surnamed Caligula, "was born on the last day of August (Prfd. cal. Septembris) in the year of his father's consulship with C. Fonteius Capito." According to the same authority, "he lived twenty-nine years" (C. LIX), being assassinated "on the ninth of the Kalends of February" (or January twenty-fourth), in the consulate known as "Caius Caligula IV. and Sentius Saturninus." (J. P. 4754 or 41 A. D.) If, then, Caligula was cast out of ex-

istence and office in Nab. 788 or 41 A. D., the first of his twenty-nine years of age would be Nab. 760 or 12 A. D., his birthday being the eleventh day of the Egyptian (or Coptic) year.

With a final demonstration of authority in the chronology of Rome, the Capitoline Marbles reappear on the scene officially and irrefutably to define the consulship of C. Silius and L. Munatius Plancus [J. P. 4726 or 13 A. D.] as identical in part with the thirty-fifth year of the tribunitian power of Augustus and the fourteenth of the tribunitian dignity of Tiberius. It is also designated the fifty-fifth year of Augustan glory in the *Chronicles* of Eusebius and Hieronymus. In this administration, too, Augustus accepts the empire a fifth time for ten years. The consistency of this imperial reckoning alone would require the location of this consulship here. Enough, however, has been said to prove the correct position of this term and the next.

The concluding consulship of Caesar Augustus' long reign, that of Sextus Pompeius and Sextus Appuleius, also popularly called the consulship of the two Sexti [J. P. 4727 or 14 A. D.], is rendered doubly famous by the two great events of the year: the third and last ecumenical census and lustrum solemnized by Augustus, and the death of the great emperor himself. In regard to the first, the *Chronicle* of Eusebius declares that this census was taken in the fifty-sixth year of the government of Augustus. An inscription found in Norisius (*ad Cen. Pisan.* p. 261) fixes this registration to the interval between the V. Kal. Jul. (June twenty-seventh) and the XIV. Kal. September (August nineteenth), J. P. 4727 or 14 A. D. The death of Augustus, on the other hand, took place on this latter date, being the last day of the Egyptian (Coptic) year Nab. 761. This all-important circumstance, that it was the finishing factor in the Egyptian mode of reckoning, secured to him the forty-third year of the count accorded him in Ptolemy's *Canon*. If he had died a day or two sooner, the tally would have been given to Tiberius Caesar. As it is, these well-authenticated facts make this consulate of the two Sexti one of the imperishable pillars of Roman chronology.

We fear we should be found remiss in the performance of our work if we did not take into account the reputed length of Augustus Caesar's reign, superfluous as it may seem in the light of the evidence accumulated. It would seem that the facts themselves had emerged from the mass of material in unmistakable clearness, and these, again, would indicate that Ptolemy's *Canon* was true to the day in assigning to Augustus only forty-three Nabonassan years. It would be difficult to conceive how any authority, like Dion Cassius or Suetonius and after them Eutropius, could state explicitly that he had "reigned alone, from the time in which he conquered at Actium, *forty-four years*,

wanting thirteen days," if we had not discovered the cause of this excessive reckoning in the over-rating of the substitute consulship of C. Antistius Vetus and D. Laelius Balbus in the year 746 A. U. C. (Cap.) or 6 B. C. When, therefore, correctly understood and properly set in order, the lists of consuls themselves bear out the estimate of Josephus, Eusebius, Cassiodorus, and Hieronymus that the total general rule of Augustus did amount to a round fifty-six years, and his sole imperial reign, as stated in the *Astronomical Canon*, to forty-three years. We shall close the long and glorious reign of Caesar Augustus with a line-up of consuls for the last section.

A.U.C. Trib. Aug. Olymp.				Consuls.	Nab. J.P. or A.D.		
754 ⁴	25	45	195 ³	L. Aelius Lamia; M. Servilius	750 ³²	4716	3
755 ⁵	26	46	195 ⁴	Sex. Aelius Catus; C. Sentius Sturninus	751 ³³	4717	4
756 ⁶	27	47	196 ¹	Cn. Corn. Cinna Magnus; L. Val. Messal Valesus	752 ³⁴	4718	5
757 ⁷	28	48	196 ²	M. Aemilius Lepidus; L. Arruntius	753 ³⁵	4719	6
758 ⁸	29	49	196 ³	Q. Caecil. Metell. Creticus; A. Licin Nerva Silanus	754 ³⁶	4720	7
759 ⁹	30	50	196 ⁴	M. Furius Camillus; Sex. Non. Quintilianus	755 ³⁷	4721	8
760 ¹⁰	31	51	197 ¹	C. Poppaeus Sabinus; Q. Sulpicius Camerinus	756 ³⁸	4722	9
761 ¹¹	32	52	197 ²	P. Cornelius Dolabella; M. Junius Silanus	757 ³⁹	4723	10
762 ¹²	33	53	197 ³	M. Aemilius Lepidus; T. Statilius Taurus	758 ⁴⁰	4724	11
763 ¹³	34	54	197 ⁴	Germanicus Caesar; C. Fonteius Capito	759 ⁴¹	4725	12
764 ¹⁴	35	55	198 ¹	C. Silius; L. Munatius Plancus	760 ⁴²	4726	13
765 ¹⁵	36	56	198 ²	Sex Pompeius; Sex. Appuleius	761 ⁴³	4727	14

We have reserved the discussion of the prodigies attending the decease of the great emperor up to this time, because they are of a transitional or two-way character, one of them belonging to the rule of Augustus, the other to the reign of Tiberius. The obscuration of the sun in the former and the darkening of the moon in the latter, have been considered so decisively significant in their chronological bearings, that writers like Dr. Jarvis, Mr. Page, and Prof. Totten, pin all their faith on these two natural phenomena for an earlier adjustment of all historical events previous to this time, while the opposing school finds equally good grounds in them for a later-than-fact adjustment.

In regard to the former event, Dion Cassius, the leading Roman historian, says: (*H. R.*, L. lvi. C. 29): "There was a total eclipse of the sun and a great part of the heavens seemed to be on fire, and blood-red comets were seen." And Eusebius, the Christian church-father, (according to the Armenian version of his *Chronicle*,) says. "*Defectio solis facta, et Augustus mortuus est*"

(an eclipse of the sun took place, and Augustus died). This statement is repeated by St. Jerome and Syncellus.

The fact itself appearing to be well attested, it is all the more imperative that we examine this case in the most thorough-going and exhaustive manner, in view of the diverse treatment it has received at the hands of chronologists. From the most absolute denial of its ever happening to the most emphatic assertion with affirmations strong as proofs from Holy Writ, this alleged astronomical occurrence is considered by many an unfailing criterion and touchstone of chronological truth. Let us look at its data more closely.

At a glance it is perceived that the data defining this solar eclipse are of the scantiest and vaguest order. In fact, they are so vague and nebulous that the inference is pardonable that the whole affair is fabulous and fictitious. It looks so much like an old-time story invented for the purpose of enhancing the glory of the departed demi-god, that this was actually the view of the conservative champion of the commonly accepted chronology, Petavius. If, on the other hand, the description of this obscuration had differed from the wonder kind, in that it gave distinctive particulars and characteristic details, it might be easily recalculated. For instance, if it had been defined as falling on a Wednesday or the fourth day of the week, or on the Floralia, or on the IV. Kal. Maías, it could be positively identified as that of April twenty-eighth, J. P. 4726 or 13 A. D. If it had been defined as falling on a Saturn's day, or on the day when Taurus sets, or on the X. Kal. Novembri, it could be proven to be that of October twenty-third, J. P. 4726 or 13 B. C. Again, if it had been defined as falling on a Monday, or on the Equiria in the Circus Maximus, or on the XIV. Kal. Maías, it could be declared beyond the shadow of a doubt to be that of April eighteenth, J. P. 4727 or 14 A. D. Finally, if it had been defined as falling on a Sunday, or on the FERIA to the victory of Augustus, or on the IV. Nones Septembri, it could be indisputably determined as that of September second, J. P. 4728 or 15 A. D. And then, as the case might be, Jarvis, or Petavius, or Seyffarth, might be vindicated and declared altogether right in their contentions. As it is, there is nothing to direct our course but a hazy, hypothetical theory called by Eusebius "the year of Abraham 2029," or the solid, substantial truth stated by Dion Cassius: "In the following summer [after his birthday, September twenty-third in A. D. 13], in which Sextus Appuleius and Sextus Pompeius were consuls, Augustus went into Campania, and died at Nola." The consulship of the two Sexti, Appuleius and Pompeius, being irremediably fixed by all known lines of evidence to the Julian year, J. P. 4727 or 14 A. D., we adhere to the almost universally accepted

chronology, and prefer, with Petavius, to acclaim, as the correct date of the death of Augustus, the consulship of the two Sexti, but without the incumbrance of miraculous obituary increment. We reject the testimony of Eusebius all the more willingly because he was capable of committing a chronological monstrosity like this one related by Dr. Jarvis (*Chron. Intr.*, p. 416), himself a protagonist of the anachronistic scheme: "After speaking of our Saviour's ministry as extending three years after the fifteenth of Tiberius, so as to bring his crucifixion to the nineteenth year, he says: '*About these times*, Josephus relates that in the days of Pentecost, a commotion and noise attracted the attention of the priests, and then a sudden voice was heard from the Holy of Holies, saying, Let us depart hence'." About what times? Surely not about the times of our Saviour's ministry or crucifixion. The words of Josephus occur in his account of the destruction of the Temple by the Romans [*De Bel. Jud.* lib. VI. C. 5]. If Eusebius observed this, the passage was irrelevant to his subject; if he did not, and adduced it as a proof that our Saviour suffered in the nineteenth year of Tiberius, he has committed an anachronism of thirty-seven or thirty-eight years; for the prodigies related by Josephus, occurred at the feast of Pentecost, in the second year of Vespasian."

In like manner, recurring to the post-mortem prodigy in the wake of the emperor's death, we are constrained to consider the chronological bearings of the lunar eclipse reported by Tacitus and Dion Cassius. The former, giving the more complete account of the occasion which caused this lunar eclipse to take so prominent a place in his narrative of the times, describes at length (*Tac. Annals* B. I. C. XXVIII) the insurrection of the Roman soldiery in Pannonia, in early sequence, and partly in consequence, of the death of Augustus, the inception and the progress of the uprising to the point of running in an orgie of crime, and then he depicts the dramatic turn administered to this mutiny by the unforeseen and unexplained interference of the moon. "The night that followed seemed big with some fatal disaster, when an unexpected phenomenon put an end to the commotion. In a clear and serene sky the moon was suddenly eclipsed... The planet, in its languishing state, represented the condition of the legions: if it recovered its former lustre, the efforts of the men would be crowned with success... Every gleam of light, inspired the men with joy; and the sudden gloom depressed their hearts with grief. The clouds condensed, and the moon was supposed to be lost in utter darkness... A religious panic spread through the army. The appearance of the heavens foretold eternal labour to the legions; and all lamented that by their crimes they had called down upon themselves the indignation of the gods. Drusus

took advantage of the moment. . . . He gave orders that the men who by honest means were most in credit with the malcontents should go round from tent to tent. . . . They visited every part of the camp. . . . They allured some by promises, and by terror subdued the spirit of others. . . . At the return of day, Drusus called an assembly of the soldiers," Dio Cassius, in a much briefer sketch, speaks of the revolt in Pannonia, tells of the arrival of Drusus with the praetorian guards and of the reception given the retinue and the general himself, and then barely mentions the eclipse of the moon which so excited the imagination of the superstitious soldiery that in their dismay and utter discomfiture they sued for mercy both from the gods and from their commanders.

The question now obtrudes itself. What obscuration of the moon was it that put a quietus on the moon-struck madness of the mutineers? The representatives of the anachronistic school of chronology very candidly mention the two instances of lunar obscuration in 13 and 14 A. D., but do not even allude to the one selected by the champion of metachronism. And, forsooth, it is hardly deserving of consideration, seeing a circumstance mentioned by Tacitus precludes the possibility of its being the eclipse intended. The historian states it repeatedly. "The rigour of the *winter*," says he (C. XXX), "which set in earlier than usual, added to the afflictions of the army"; and, again, "to avert impending vengeance, the only expedient was to depart at once from a vile inauspicious camp, the scene of so many crimes, and, by due atonement, expiate their past offences in their *winter*-quarters." In the face of this fact, Dr. Seyffarth, who places the death of Augustus in J. P. 4729 or 16 A. D., pitches upon the lunar eclipse of January thirtieth, 17 A. D., as the darkness referred to by Dio and Tacitus, not considering that that obscuration, even if suitable in other respects, would place the Pannonian insurrection in the depth of winter and, to cap the climax, in a consulship subsequent to that of the death of Augustus. It is therefore properly disposed of by observing it with silence.

The other two obscurations selected as the eclipse of the moon intended by the historian, are candidly set forth by Dr. Jarvis, Mr. Page, and Prof. Totten in the following words: "The only eclipse of the moon which happened A. D. 13 after August nineteenth, was on the seventh of October, at 7h. 45m. evening, and there were only three digits and a quarter eclipsed, or less than one third of the moon's disc. On the other hand, the eclipse in A. D. 14, on the twenty-seventh of September, took place at five o'clock in the morning, and was total. The question now is, to which of these eclipses had Tacitus or Dio reference?"

Since we have here the real bone of contention, it is incumbent on us to inquire, with scrupulous, conscientious care, what

definite, particular circumstances are expressly mentioned by the historian to assist us in identifying the revolt-preventing obscuration in the first year of Tiberius Caesar? Was it defined as partial or total? Was it precisely dated, or so minutely described that its identity could not be mistaken? No, it is not rendered conspicuous or especially noticeable by any marks of an astronomical or chronological character. It happened in the night, to be sure; but in what part of the night, the historians do not state with any degree of exactitude. "It will [therefore] appear," is Mr. Page's tactful admission, "that, by the old solar and lunar tables which Dr. Jarvis used in his calculations, the eclipse of A. D. 13, while corresponding in other respects, was not sufficient in quantity to have produced the effect recorded; for less than one-third of the moon's disc was obscured; and this was surely not sufficient to alarm the mutinous veterans." And Dr. Jarvis himself, who first sponsored the eclipse of A. D. 13, has this to say:

"It may possibly be supposed that the total eclipse of A. D. 14 would accord better with the facts mentioned by Tacitus than the partial eclipse of A. D. 13. Let us proceed, therefore, to examine these facts, on the supposition that it was the partial eclipse.

"The moon being an hour and a half high, and the heavens perfectly serene, the eclipse began on the eastern limb in the sight of the whole army. It increased for about three quarters of an hour, and then began to decrease. The superstitious soldiers, considering the moon as a divinity assailed by some calamity, with which she was struggling, thought to help her, and to frighten away the enemy, by the noise of their instruments. Considering the event as ominous of their own destiny, they mourned as the eclipse increased, and rejoiced as it decreased. Their joy would have been complete, if they had seen the moon perfectly escaped from the eclipse, and restored to her brightness and clearness; but, during the decrease, and in the midst of their joy and hope, black clouds arose, which hid her entirely from their view, so that she seemed buried. The night, at first so serene, became dark and dismal, and, to their terrified imaginations, portentous of Divine vengeance. All these circumstances are perfectly reconcilable with the partial eclipse *in the evening*, but, to me, do not appear to be so with the total eclipse *in the morning*."

It seems certain that Dr. Jarvis, having in mind a similar occasion at a later date, could, if he would, have delivered himself of the very reverse of the opinion just now expressed. Commenting (in *Chron. Introd.*, p. 317) on the battle of Cremona, which like the revolt in Pannonia, was decisively influenced by the

intervention of the moon, he gave expression to the following fairer words: "Dion, who has given a most eloquent description of this battle, mentions a circumstance, omitted by Tacitus, which enables us to fix the date. 'While this commotion existed in the army of Vitellius, it was greatly increased by an eclipse of the moon, which to their terrified minds seemed not only overshadowed, but to be black and bloody, and to emit other fearful colours. The soldiers, however, did not on this account desist from their purpose; but when Primus [the general of Vespasian's army] sent messengers, they sent others, exhorting him to submit to Vitellius. This brought on a severe battle, though the soldiers of Vitellius were without a general, for Alienus [Caecina] was in chains in Cremona'.

"*At sunrise* a panic seized the soldiers of Vitellius, and they fled to Cremona. By the tables of Pingre, it appears that a total eclipse of the moon took place A. D. 68, October twenty-ninth, at 6h. 30' A. M. The moon was then in the western horizon, and the approaching light of the sun in the east, and the exhalations in the west, produced the variety of colours by which the soldiers were terrified."

It goes without saying that whatever was possible and productive of certain results at the battle of Cremona, was possible and productive of the same results at the rebellion in Pannonia. The eclipse of A. D. 14, computed and reported by Petavius, is recorded by him as follows: "Beginning, 3h. 18', 32". Middle, 5h. 14' 32". End, 7h. 6' 32". Whole duration, 3 h. 52', or nearly four hours. Post meridiem [should be A. M.], Septemb. XXVIII [XXVII]." And Brotier, in his note on the passage in Tacitus, refers to Petavius as his authority, and says: "This eclipse of the moon happened *in the morning*, on the twenty-seventh day of September, A. U. C. DCCLXVII. J. C. 14. Its beginning was at 3h. 18' 32", its end, 7h. 6' 33". Acknowledging the superior qualifications of the total obscuration in A. D. 14, Mr. Page declares: "It is true that, in quantity, the eclipse of September twenty-seventh, A. D. 14, was much more calculated to inspire fear among those ignorant of its causes," and then proceeds to give the reasons for his choice of the eclipse of 13 A. D.

Among the collateral arguments in favor of the partial obscuration of A. D. 13 as the eclipse which, partially at least, determined the succession of Tiberius as emperor of Rome, Mr. Page reiterates the reasoning of Dr. Jarvis from the impracticability of the military measures taken by Tiberius and Drusus to quell the rebellion. It is argued that the time between the death of Augustus on August nineteenth and the fortunate interference of the planet was too short if limited to the eclipse of September twenty-seventh, 14 A. D., but long enough—eleven days longer

—if extended to October seventh, 13 A. D. But what would be the great advantage gained by lengthening out the interval eleven days? Would the feasibility of the necessary forced march around the Adriatic Sea appear very much more probable? No. The rate of twenty miles a day by heavy-armed troops for a period of at least thirty days in succession is still excessive, and militates against the likelihood of being successful. But this very suggestion of forced marching enforces the question. Does Tacitus or Dio affirm that this military movement was executed by a record-breaking race of forced marches? Not Tacitus. He simply says (c. xxiv) that, when Tiberius heard of the doing in Pannonia, "he resolved without delay, to despatch his son Drusus, with others of high rank, and two praetorian cohorts, to quell the insurrection." Not a word about the manner of execution. Perhaps the method employed by other commanders might throw a little light on the subject.

When Julius Caesar "had marched through Italy to Brundisium, where he arrived at the winter-solstice," did he march with his army around the head of the Adriatic Sea—on foot—by forced marches—to get into Epirus? No; "he crossed the sea," as Plutarch says, "and landed at Oricum." When Brutus was on the point of joining his forces with those of Cassius for the decisive battle of Philippi, did he march his men on land around the Hellespont and the Black Sea to get them together in Macedonia? No; he "transported his army," as Plutarch says, "from Abydos to the opposite continent." When Tiberius returned from Dalmatia to attend the obsequies of Augustus at Rome, do you think he trudged the weary way around the Adriatic Sea, when Dalmatia was situated in the same latitude with Rome itself? Why, then, should not Drusus, when bound for a country but little north of Dalmatia, and almost just as directly opposite to Rome, avail himself of his ample shipping facilities and transport his troops by trireme? This would immeasurably expedite his dispatch, and, at the same time, alleviate the hardships of the dash. There were more ways than one of doing a thing in those days, just as there are today. The argument, therefore, from the infeasibility of the maneuver of dispatching a body of Roman troops to Pannonia within the interval between the nineteenth of August and the twenty-seventh of September, falls noiselessly to the ground—it is so empty.

In conclusion, another argument for the decease of Augustus and the accession of Tiberius in 13 rather than 14 A. D. is sought in the suppression of the news concerning the demise of Augustus. The twentieth and twenty-first of August corresponded to the first and second days of the Egyptian month Thoth, of the year Nab. 761. It is argued that these two silenced and suppressed

days of the emperor's quasi-post mortem reign do, and should, include the initial or New Year's day of Nab. 761, and, therefore, by implication, do and should accredit the whole vague year of 365 days to Augustus, although he was dead as a doornail all of their forty-eight hours. But, even if this tale of repression were true, this doubtful circumstance has no relevance to the chronological emplacement of events. For since the ancients did not consider a ruler's regal year worth counting (as a whole) unless it involved the finishing day or "final" of the year, this Nabonassan year 761 cannot be legitimately ascribed to Augustus, unless he outlasted and outlived its "final." In the anachronistic procedure, however, of Jarvis, Page, and Totten, Augustus is positively and absolutely deprived of his forty-third year in the *Astronomical Canon*, and Tiberius is invested with a twelvemonth of government which he never gave. It is a logical conclusion, then, that, if Augustus Caesar reigned forty-three years according to Ptolemy's *Canon*, and died in the fifty-sixth year of his total sovereignty, the thirty-sixth year of his tribunitian authority, and that in the consulship of Sex. Appulieus and Sex. Pompeius, it is certain that he died in the Julian year J. P. 4727 or the fourteenth year of the Christian Era, on the nineteenth day of August, since that is the pivotal day which secured to him the name and title of Nab. 761. As a self-evident corollary to this proposition, it follows that, whereas the first final survived by Tiberius as acting emperor and invested by him with governmental significance, was the last day of the epagomenae of Nab. 762, it is Nab. 762 (and not 761) that is represented in the *Astronomical Canon* as the first regnal year of Tiberius Caesar. There being no escape from real facts, we may now resume our inquiry into the list of consulates in the reign of Tiberius.

In order to present the reign of Tiberius, because of its incalculable importance, in a form as solid and unshakable as possible, we shall subdivide it into three conveniently surveyable sections. The first, as given by Tacitus (*Ann. B. IV. C.I.*), will span the first *nine years* of his reign, and may be remembered as the period of tranquillity and peace. The second, consisting of *six consular terms*, may be noted as the period of trouble and disaster. The third, comprising the remaining seven consulships, may be described as the period of unbridled tyranny and despotism.

The first of these periods, which is termed that of tranquillity by Tacitus, was indeed ushered in by Tiberius with a crime; but, since the indictment could not be proven upon him, the affair was soon forgotten and silenced. This was so early in the beginning of his administration, in fact on the twentieth or twenty-first of August, 14 A. D., that Suetonius remarks: "He did not

make public the death of Augustus, until he had taken off young Agrippa." And then he did not assume the administration of the empire as if he were at all anxious to do so. On the contrary, "he affected, by a most impudent piece of acting, to refuse it for a long time....At last, as if forced to it,—he accepted the government; not however, without giving hopes of his resigning it some time or other." Professing to be in a bad state of health, and otherwise hardly in a condition to assume the whole of the government by himself, he played the part of an extremely modest and unassuming sovereign. He barely suffered his birthday, which happened to fall at the time of the Plebeian Circensian games [XVI. Kal Dec. or November sixteenth, 14 A. D.] to be honored with the slight distinction of a single added chariot, and, as if in protest against the idolatrous obsequiousness of the age, would not permit himself to be addressed with the praenomen of *Emperor* or the cognomen of *Father of his country*, still less with the divinity title of *Augustus*. "That he might not begin his reign by an act of severity, he did not call Libo [a senator accused of fomenting a rebellion] to account before the senate until his second year, being content, in the mean time, with taking proper precautions for his own security." To this end, "he never set foot outside the gates of Rome *for two years together*, from the time he assumed the supreme power; and after that period, went no farther from the city than to some of the neighboring towns, his farthest excursion being to Antium on the seacoast, about thirty-eight miles from Rome. We may therefore pass lightly over the first two years of his reign, Nab. 762 and 763, as barren of chronological features. The consuls were:

A. U. C. (Varro) Olymp.		Consuls	Nab. J. P. or A. D.	
766—768	198 ³	Drusus Caesar; C. Norbanus Flaccus	762 ¹	4728
767—769	198 ⁴	T. Statil. Sisenna Taurus; L. Scribonius Libo	763 ²	4729

The third year of Tiberius, most easily and accurately measured by the Nabonassan years (almost to a day) now and throughout his reign, hence Nab. 764³, witnessed the inauguration of the consuls C. Caecilius Rufus and L. Pomponius Flaccus Graecinus in what was then A. U. C. 768 (if the Capitoline computation still obtained, or of Varro 770 if it was already in vogue). On the twenty-sixth of May (VII Kal. Jun.) of this year, 17 A. D., Germanicus, who had been decoyed and commanded away from further aggrandizement in Germany, was lured to celebrate a triumph over foes not yet entirely conquered, and furthermore enticed to agree to a second consulship in the ensuing year. To lay the foundation for his ruin still deeper, the wily emperor took advantage of the state of affairs in the far East. Upon the death at Rome of Archelaus, the aged king of Cappadocia, his kingdom

was reduced to a Roman province. About this time, too, died Antiochus, the king of Comagene, and Philopater, the king of Cilicia, throwing their kingdoms into the throes of violent revolutions. The same juncture the provinces of Syria and Judea petitioned to be relieved from the burden of oppressive taxes. Surely there was opportunity and occasion enough to plead the necessity of intervention. To adjust the affairs of the East, as Caius Caesar had done in his consulate, Germanicus was elected to do likewise in his. In addition, however, or perhaps, in underhand opposition, to this arrangement, Tiberius recalled Creticus Silanus from the governorship of Syria, and in his place appointed Cneius Piso. Piso understood his part in the scheme. "The government of Syria, he made no doubt," as Tacitus reports it (*Ann.* B. II. C. XLIII.), "was given to him, as a bar to the hopes of Germanicus. For this purpose secret instructions were at the time said to have been given to him by Tiberius."

If, beside the employment of diplomacy, any demands were made on Germanicus in the course of his consulship in Asia, they must have been made on his charity and philanthropy. For in this year, before Germanicus had entered upon his term of office, a great calamity had smitten a dozen of its principal cities. By an earthquake of the greatest severity, Sardes, Magnesia, Temnos, Philadelphia, Egæa, Apollonia, Hierocaesarea, Myrina, Cyme, Tmolus, as also the Mosthenians, and the people called the Macedonians of Hyrcania, were partly or totally destroyed. Certain it is that this catastrophe took place in the second half of the consulate of C. Caecilius Rufus and L. Pomponius Flaccus Graecinus (in Nab. 764³) or 17 A. D.), after the triumph of Germanicus, and possibly before the close of the 328th year of the Selencic Era; at any rate, before Germanicus started out on his journey to the East and Egypt. He had, therefore, an abundance of diplomatic and philanthropic work in view, which would occupy every minute of his time, not only during his own consulate, but some of his predecessors' as well. So, being also made governor-in-chief over all the provinces beyond the Mediterranean, with supreme command and complete authority over all other governors in the East (Cappadocia, Comagene, Cilicia, Syria, and Judea, Egypt, etcetera, etcetera), he was compelled, if he intended to do anything worth while in his proper sphere of action in his own consulate, to set out for the scene of action before the expiration of the preceding consular year. Accordingly, he was on his way when the inaugural day of his consulship arrived, the first of January, A. U. C. 769 (Varro 771) or J. P. 4731 (A. D. 18). He entered on his office at Nicopolis, the trophy of Octavius' victory at Actium, as colleague of the emperor himself, Tiberius being consul for the third time, Germanicus for the second. This

date almost bisected the fourth year of Tiberius on the *Astronomical Canon*, Nab. 765⁴, and was forty-six years and four months after the battle of Actium. He spent his entire consulship (J. P. 4731 or 18 A. D.) going about, doing good, in Armenia, Cappadocia, Comagene, everywhere establishing or restoring tranquillity. His consular year, however, came to an end with a stormy interview with Cneius Piso.

In the consulship which followed, Marcus Silanus and Lucius Norbanus, in A. U. C. 770 (or Varro 772) or J. P. 4732 (19 A. D.), Germanicus carried out his intended tour into the land of the Pharaohs. This ancient country had been declared an imperial province by Augustus, into which no senator nor Roman knight might enter without an imperial permit. This restriction was now applied to Germanicus, though in fairness not applicable to him. Tiberius complained to the senate of his inspection of Egypt as if an enemy spy had clandestinely possessed himself of military and state secrets, and, potentially, had acquired the means of starving Rome itself into submission. Of course, Piso, too, took a clue from his master's manner, and with a vengeance transmitted every measure of Germanicus, whether civil or military, into the opposite of what he had intended. It goes without saying that this high-handed as well as underhanded procedure of Piso's led to almost daily altercations and quarrels, until Germanicus, suddenly taken ill, was forced to give in, as was generally believed, to the superior power of Piso's toxic argument. He died in November, sometime before the festivals of December (mentioned by Suetonius), at Epidaphne, but was incinerated at Antioch. Agrippina conveyed his ashes to Rome during the winter of 19-20 A. D. The new consuls, M. Valerius Messala and M. Aurelius Cotta, who had just entered upon their office on the first of January, went out of the city limits to meet his remains, with the whole body of the senate and a numerous following of mourning citizens. It was, therefore, early in January, J. P. 4733 or 20 A. D., at the dead waist and middle of the emperor's sixth year of government, Nab. 767, that Tiberius, the incipient tyrant, had the satisfaction of seeing the obsequies of his rival for popular favor, to the greatest regret and grief of the people.

The public mourning for Germanicus had already continued almost half a year, when Tiberius found it necessary to do something, partly to divert the people's mind by a call to observe the Megalesian games (April 4-11), partly to comply with the popular cry for vengeance. "Whatever," he said, in the first place, "may be the fate of noble families, the commonwealth is immortal. Let all resume their former occupations; and, since the Megalesian games are near at hand, let the diversions of the season assuage the general sorrow." (Tac. *Ann.* B. III. C. VI). In the second

place, Tiberius, in a premeditated speech, explained his sentiments in regard to a trial of Piso and Plancina. "Whether he had made it his business, by arrogance and a contentious spirit, to exasperate the prince [Germanicus]; whether he rejoiced at his death; and, above all, whether he was accessory to it; were questions that called for a strict, but fair inquiry." Piso was tried and found guilty. It was only by the artifice of Sejanus, the flatterer of Piso as well as Tiberius, that the implication of the real authors of the tragedy was averted. To avoid the imminent disgrace of a public execution, Piso put an end to his own life.

Another incident of this consulate served to relieve the tension of the times. The people saw with pleasure a son of Germanicus raised to public honor and dignity. Having commended Nero, the eldest son, to the senate, Tiberius "commanded by petition" that he be permitted to stand candidate for the quaestorship *five years earlier* than the law allowed. The senate not only granted what was asked, but added a seat in the pontifical college. Naturally his marriage with Julia, the daughter of Drusus, following soon thereafter, increased the general satisfaction of the people.

"The year [A. U. C. 772 (Varro 774); A. D. 21], which we are now to open", says Tacitus (*Ann.* B. III. C. XXXI), "stands distinguished by the joint consulship of the father and the son; Tiberius for the fourth time, and Drusus the second. It is true that, two years before, Germanicus shared the same honour; but...the tie of affinity between them was not so close as the present...Tiberius had scarce entered on the office in conjunction with Drusus, when, pretending to recruit his health, he removed into Campania, perhaps even then meditating that long retreat, which was afterwards his plan of life; perhaps, intending to give Drusus the honor of discharging the consular functions, without the assistance of his father." There were those, however, who speculated on a different possibility. As Dion Cassius has it (LVII. 20): "Men immediately predicted the destruction of Drusus, because whoever had been consul with Tiberius (Quintilius Varus, Cn. Piso, and Germanicus), had died a violent death." We leave the reader to determine what truth, if any, was contained in this allegation.

The next consulate, that of Decimus Haterius Agrippa and Caius Sulpicius Galba (A. U. C. 773 [Varro 775] or 22 A. D.), recalls to our minds a governmental institution particularly valuable in the past as a chronological score or standard, the terms of tribunitial authority introduced and tactfully conducted by Augustus. Twenty-two years before, simultaneously with his step-father's twenty-second year of tribunitial power, he had acceded to that dignity and authority which he now desired for his

own son Drusus. "That specious title," says Tacitus (*Ann.*, B. III. C. LVI), "importing nothing less than sovereign power, was invented by Augustus, at a time when the name of king or dictator was not only unconstitutional, but universally detested. . . . In that power usurped, Marcus Agrippa became his colleague; and, after his death, Tiberius Nero succeeded. By the last promotion, it was the policy of Augustus to mark out the line of succession. . . . Tiberius, in the present juncture, followed the precedent left by Augustus. Accordingly, Tiberius this year introduced the character and qualifications of Drusus, mentioning as proofs of his merit, a probation of eight years, seditions quelled, wars happily terminated, the splendor of a triumph, and two consulships. The eight years of meritorious trial were Nab. 762-769 (incl.) The two consulships were A. U. C. 766 (Varro 768) or J. P. 4728 (15 A. D.), and A. U. C. 772 (Varro 774) or J. P. 4734 (21 A. D.). The emperor's wish, of course, was law.

While speaking of associations in the government of the empire, it may be well to remark right here that, if ever there was a so called "associate reign of Tiberius Caesar in conjunction with Augustus Caesar," one which was in reality employed and documentarily registered as a current measure of regnal time, it is this particular line of tribunitian years actually served and observed by himself as a chronological metron of his own administration. For Tacitus says expressly (III. LVI.) that, since "a new name was wanted to overtop the magistrates and the forms of the constitution," this office and title were invented for the purpose. If, then, this office of tribuneship was in truth the highest known and highest created form of association in government with Augustus, how can there be still another grade of association which is higher than the highest? Is it not absolutely futile and supererogatory to look for another whose "fifteenth year" shall precede the historical fifteenth year of Tiberius Caesar by two or three consular terms? The fifteenth year of Tiberius in his tribunitian capacity was the death-year of Caesar Augustus, and the fifteenth year of Tiberius Caesar as emperor at Rome and king over Egypt will be found to tally with his thirtieth year of tribunitian authority. Outside of these two instances of real, actual enumeration, history knows of no other "fifteenth year" of Tiberius Caesar.

We now arrive at the last of the nine years contained in the first period of Tiberius Caesar's reign, the period of tranquility. The consuls for the year (A. U. C. 774 [Varro 776] or J. P. 4736 = 23 A. D.) were Caius Asinius Pollio and Caius Antistius Veter. As Tacitus tells us (*Ann.* B. IV. C. I): "Tiberius had reigned nine years. During that time a state of profound tranquillity prevailed at Rome, and the emperor saw the imperial

family flourishing with undiminished lustre. . . . But fortune now began to change the scene, and a train of disaster followed."

The nine years of government here attributed to Tiberius are best traced on the Nabonassan scale, being almost identical to the day with the Nabonassan years 762 to 770. The inauguration day of the ninth consulship almost divides the year Nab. 770 into equal halves, though, for that matter, all of the consular inauguration days under Tiberius did nearly the same thing, making it apparently a thing impossible to move this series of consulships either up or down the scale. With a line so strongly entrenched in the very bed-rock of chronology, we may safely rest assured that the catalogue of consulships which we now give at the end of this first period of prosperity and peace, is the true historical succession of consular magistrates, as they lived and moved and had their being. The list is this:

<i>A. U. C. (Varro) Olymp.</i>		<i>Consuls.</i>	<i>Nab. J. P. or A. D.</i>		
766—768	198 ³	Drusus Caesar; C. Norbanus Flaccus	762 ¹	4728	15
767—769	198 ⁴	T. Statil Sisenna Taurus; L. Scribonius Libo	763 ²	4729	16
768—770	199 ¹	C. Caecil Rufus; L. Pomponius Flaccus Graecinus	764 ³	4730	17
769—771	199 ²	Tiberius Caesar III; Germanicus II.	765 ⁴	4731	18
770—772	199 ³	M. Junius Silanus; L. Norbanus Flaccus	766 ⁵	4732	19
771—773	199 ⁴	M. Valerius Messala; M. Aurelius Cotta	767 ⁶	4733	20
772—774	200 ¹	Tiberius Caesar IV; Drusus (his son) II.	768 ⁷	4734	21
773—775	200 ²	D. Haterius Agrippa; C. Sulpicius Galba	769 ⁸	4735	22
774—776	200 ³	C. Asinius Pollio; C. Antistius Vetus	770 ⁹	4736	23

The prime, efficient cause of the drastic and tragic revolution in the affairs of Rome, according to Tacitus, was Aelius Sejanus, who, like Joseph, the prime minister of Pharaoh, practically ruled the world. By devious arts and pernicious practices he gained such a scandalous ascendancy over the emperor himself that he could commit murder, so to speak, and get away with it. Not that Tiberius himself felt in any way insecure in the seat of empire: on the contrary. The first year of this "fatal era of tyranny and oppression," which happened to be the consulship of Cornelius Cethegus and Visellius Varro (A. U. C. 775 [Varro 777] or 24 A. D.), was also the *tenth* year of the first decennial period in the reign of Tiberius. Hence the historian, Dion Cassius observes (*H. R.*, B. LVII. C. 24): "Ten years of his empire being finished, he had no need of a decree to resume it, for he did not think it necessary to divide it into decennial periods, as Augustus had done. Nevertheless," he adds, "decennial games were celebrated." That is to say, the games and festivities with which the lustrum, or conclusion of the decennial (or twice quinquennial) census was solemnized, were celebrated, for the

obvious reason that revenue and income are never a negligible quantity. It was a regular census and lustrum year, which, by its reestablished seriation, further fortifies and reinforces the chronological position of Tiberius' reign.

It is not our purpose to repeat the historical narrative of these times. Enough if we succeed in impressing the chronological outlines on our minds. Let it suffice, then, to say that, during the following consulship of M. Asinius Agrippa and Cossus Cornelius Lentulus (A. U. C. 776 [Varro 778], or 25 A. D.), charges and accusations increased to such an extent that the historian of the times declares: "The whole of this year was one continued series of prosecutions." The incessant repetition of the same petty impeachments and the slabbering obsequiousness with which they were presented, so disgusted and nauseated Tiberius that he ever more and more avoided the sessions of the senate and the gatherings of the people. Already he ruminated the advisability of withdrawing from public life and enjoying, if possible, the seclusion of the country.

In the consulship of Cn. Lentulus Gaetulicus and C. Calvisius Sabinus (A. U. C. 777 [Varro 779] or A. D. 26), the emperor actually set out for Campania, ostensibly with the intention of dedicating a temple to Jupiter at Capua, and another temple to Augustus at Nola, but, in truth, with a determination never to return to Rome. "Relying on the authority of eminent historians," says Tacitus, himself an historian, "I have ascribed the secret cause of this retreat to the artifice of Sejanus; but when it is considered that, after the downfall of that minister, Tiberius passed the six following years [31 to 37 A. D.] in the same recluse manner, I am inclined to refer the whole to the workings of a dark and politic spirit, that wished to hide in solitude the lust and cruelty, which in his actions were too manifest to the world." If, then, we may be permitted to reckon backwards from the day of his death to the present consulate, this is the initial time of that protracted retreat from the world. For, says he again, "that the prince should remain, *during the space of eleven years* [37-11=26], a voluntary exile from the seat of government, was an event beyond the reach of human foresight." Therefore, if Nab. 784-11=773, or A. D. 37-11=26 A. D., then the *eleven years* of disgusted and disgusting retirement begin right here and now.

It would be, indeed, a singular and anomalous coincidence if, just then, when the political head of the world retired from further intercourse with the world, the religious head of the world had appeared to mix and mingle with the world, with a view and aim to saving the world. It would be a noteworthy opposite of policy, and such a difference of motivation, if it could be substantiated

that this *twelfth* year of Tiberius Caesar was, indeed, coeval and identical with an "*associate fifteenth*" of Tiberius, when John the Baptist and Jesus Christ made their inaugural appearance in the Jewish world. Of this, however, we find here no evidence, and shall therefore reserve this inquiry for a future date.

Tiberius actually "moved" into retirement when M. Licinius Crassus and L. Calpurnius Piso were consuls (A. U. C. 778 [Varro 780] or J. P. 4740=27 A. D.) The secrecy even more than the scenery of Capreae delighted and charmed his fancy, while its solitude and surroundings by sea on all sides gave him that security of feeling which he appreciated and desired most. It is outside our province to dilate on his other pleasures and pastimes.

It may not be amiss, however, to remark, as showing the trend of the times, that in this consulate, on the occasion of a dreadful fire, which reduced a great part of the city to ashes, Tiberius came as near to deification as he ever came. In the house of a senator on Mount Coelius, a statue of Tiberius had stood, and had escaped the fury of the flame as if by a miracle or direct interposition of heaven. Appreciating the munificence of Tiberius in the distribution of money and the liberality displayed in the relief of the afflicted, and withal appraising the prodigy as an indication of the will of the gods, the fathers passed a resolution that Mount Coelius should henceforth be called Mt. Augustus, "and the spot where the gods were lately so propitious to Tiberius, was declared to be consecrated ground."

The next consuls were Junius Silanus and Silius Nerva. The very first day of the year (A. U. C. 779 [Varro 781] or J. P. 4741=28 A. D.), the Kalends of January, was ushered in with a prosecution and execution, as if the two were one and the same thing. A Roman knight, Titius Sabinus, was accused of plotting against his sovereign, and immediately dragged to his death a condemned man. The general murmur, therefore, was, "Will there never be a day unpolluted with blood?—By this unheard-of outrage, he [Tiberius] gives public notice to the magistrates, that on the first day of the year, they are to open, not only the temples and the altars, but also the dungeons and the charnel-house. And Tiberius commended the zeal of the fathers in bringing to condign punishment an enemy of the state."

Whatever else may have happened or not have happened in the course of this year, J. P. 4741 or 28 A. D., nothing surpasses in interest or importance the beginning in its bosom of the fifteenth year of Tiberius Caesar. It has derived its importance from the fact that its mention is incorporated in what appears to be the most pretentious, exhaustive, and comprehensive date in the Bible. It maintains its importance not only from the fact that it is thus emphasized and immortalized in the Gospel according to St. Luke,

but also from the circumstance that, since the writing of the Gospel, it has been repeated and reiterated and so perpetuated by the [350 or more] so-called Biographies or Lives of Jesus Christ, either as the inaugural year of his ministry or as the year of his crucifixion and death. It is therefore of the utmost moment that we make sure of its chronological emplacement, without entering at the present time into a discussion of the question just when the crucifixion and death of Jesus took place.

The fifteenth year of Tiberius Caesar, accordingly, (speaking of the regular series of years known as the "reign" or "empire" of Tiberius), began in the consulship of Junius Silanus and Silius Nerva (A. U. C. 779 [Varro 781] or J. P. 4741 = 28 A. D.), on August twentieth or Thoth fifth, being almost perfectly contemporaneous with Nab. 776. It covers, approximately, only the latter half of the consulship, while it coincides with a little more than half of the following. It is never identified with the former, but so much more frequently with the latter. In its character as the first half of the "fifteenth year" of Tiberius Caesar the earlier consulate is alluded to with the greatest unanimity by the earliest Church fathers, Clemens Alexandrinus, Origenes, Lactantius, and so forth, as the year of the beginning of the Gospel, heralded by John the Baptist and preached by Jesus Christ, while the second half is employed and referred to as almost interchangeable with the consulship of Fufius and Rubellius or the consulship of the Two Gemini.

It is the unity and entirety, however, of this famous consulship, not a divided or disintegrated entity, that we wish to anchor deep down and irremoveably in the bedrock of time. We therefore avail ourselves of what collateral and subsidiary evidence we have. We know that it was "towards the end of the year" of Gaetulicus and Calvisius (in 26 A. D.) that Tiberius, under pretence of dedicating a couple of temples, left Rome never again to return (see Tacitus, *Ann.* B. IV. C. LVII), and it was in the sixteenth year of Tiberius (Nab. 777), after a period of *three years*, that Velleius Paterculus (B. II. C. CXXX), addressing his friend and patron, the consul of the year, writes: "With what violent griefs, Marcius Vinicius, has he [Tiberius Caesar] felt his mind tortured *in the last three years!*" What three distressful years were these? or were there more? Including and comprehending in this triennium the consular one-year administrations of, first, Crassus and Piso, (27 A. D.), second, Silanus and Silius, (28 A. D.); and third, Rubellius and Fufius, or the two Gemini, (29 A. D.) The fourth year thereafter, or, as Paterculus also designates it, the *sixteenth* year of Tiberius Caesar (J. P. 47 or 30 A. D.) was the consulship of M. Vinicius and Cassius Longinus. There cannot have intervened another separate and distinct con-

sulship denominated that of the two Gemini, as mistakenly assumed by the *Chronicon Paschale*, or *Fasti Siculi*, and accredited, not like a substitute term with six months or six days, but like a regular, full-orbed term of office with a complement of twelve months.

But if an extraordinary or special consulate cannot have come in between the twelfth and sixteenth regular regnal years of Tiberius, neither could another full consular term have interloped between the fifteenth and the twenty-third. The year immediately subsequent to that of Vinicius and Longinus being ascribed to Tiberius V. and Aelius Sejanus, and this being at the same time the death-year of Sejanus (XV. K. Nov. or Oct. 18), it follows that there are but *six years* left as the remainder of Tiberius' reign. And these are exactly the figures transmitted by Tacitus (*Ann.* B. IV. C. LVII). "After the downfall of that minister," says he, "Tiberius passed the *six following years* in the same recluse manner." This being so, let us, for the sake of a better review, first recount the consulates of the second period of the emperor's reign, the period of trouble and disaster; then the intermediate years between the beginnings respectively of the period of tyranny and of his complete isolation, and finally, the last *six years* of absolute self abandonment and irresponsible despotism. The consulates, accordingly, of the second period of his reign are these:—

U.C.(Varro) Olymp.		Consuls.	Nab. J.P. or A.D.	
775—777	200 ⁴	Ser. Cornelius Cethegus; L. Visellius Varro	771 ¹⁰	4737 24
776—778	201 ¹	M. Asinius Agrippa; Cossus Corneius Lentulus	772 ¹¹	4738 25
777—779	201 ²	Cn. Lentulus Gaetulicus; C. Calvisius Sabinus	773 ¹²	4739 26
778—780	201 ³	M. Licinius Crassus; L. Calpurnius Piso	774 ¹³	4740 27
779—781	201 ⁴	App. Junius Silanus; Pub. Silius Nerva	775 ¹⁴	4741 28
780—782	202 ¹	L. Rubellius Geminus; C. Fufius Geminus	776 ¹⁵	4742 29
The intermediate consulates were:—				
781—783	202 ²	Marcus Vinicius; L. Cassius Longinus	777 ¹⁶	4743 30
782—784 ¹	202 ³	Tiberius Caesar V; L. Aelius Sejanus	778 ¹⁷	4744 31
And the subsequent last <i>six years</i> of retirement were:—				
783—785 ²	202 ⁴	Cn. Domit. Ahenobarbus; M. Furius Camillus Scrib.	779 ¹⁸	4745 32
784—786 ³	203 ¹	Serv. Sulpicius Galba; L. Cornelius Sulla	780 ¹⁹	4746 33
785—787 ⁴	203 ²	Paulus Fabius Persicus; Lucius Vitellius	781 ²⁰	4747 34
786—788 ⁵	203 ³	C. Cestius Gallus; M. Servilius Monianus	782 ²¹	4748 35
787—789 ⁶	203 ⁴	Sext. Papinius Allemius; Quintus Plautius	783 ²²	4749 36
788—790	204 ¹	Cn. Acerronius Proculus; C. Pontius Nigrinus	784 ¹	4750 37

In view of this resume, brief and incomplete as it is when compared with Dr. Jarvis' review of 210 terms of consuls, it is

nevertheless plain as a pikestaff that, in the certified scale of time, there is no room for a supernumerary consulate of twelve months by the name and title of the two Gemini. There was, indeed, a consulate of that name and title, but that term of office was coincident and identical with the administration officially and conventionally called the consulship of C. Rubellius Geminus and C. Fufius (or Fusius) Geminus. Thus Tacitus, for instance denominates and describes it "the consulship of Rubellius Geminus, and Fusius, who bore the same surname." And then the great annalist relates, under this superscription and date, that Julia, the emperor's mother, styled Julia Augusta, died in this year, at an advanced old age. Beside this term of consular dignity, another line of computation is employed to commemorate this sad event. By a coin naming this year the thirtieth tribunitian year of Tiberius, the twelvemonth from June twenty-seventh, J. P. 4742 or 29 A. D., to the twenty-sixth of June, J. P. 4743 or 30 A. D., the year of Julia Augusta's death is definitely and irrevocably identified with the latter half of the consulship of the Two Gemini, which is no other than the consulship of Rubellius Geminus and Fufius (or Fusius) Geminus. For if it is certain that Julia, the emperor's mother, died in the latter part of the consulate of Rubellius and Fufius, which fell into the Julian year J. P. 4742 or the twenty-ninth year of the Christian Era, and it is equally certain that her death occurred in the first half of the thirtieth tribunitian year of Tiberius, which corresponded with the same second half of J. P. 4742 or 29 A. D., it follows as a necessary conclusion that both dates mean and denote the same time.

Now it is to this actual, historical fifteenth year of Tiberius Caesar, which is, in its latter part, constantly identified with the consulship of Rubellius Geminus and Fufius Geminus, that all of the earliest Church fathers invariably refer. When Tertullian, Lactantius, Julius Africanus, St. Augustine, Sulpicius Severus, Idatius, Eusebius, Orosius, Victorius Aquitanus, Anastasius, and Hieronymus refer to either the fifteenth year of Tiberius or to the consulship of Rubellius and Fufius, they mean those two twelvemonth periods of time which mutually overlap and cover the first half of the Julian year J. P. 4742 or of the Christian Era A. D. 29. This we have shown to be the year which immediately and without interruption preceded the consulship of Marcus Vinicius, which is also connoted as the sixteenth year of Tiberius. But not only from the express mention of this fact by Tacitus and Paterculus, this is also evident from the elaborate computation and proof furnished by Cassiodorus, Victorius and Idatius. With the sole exception of the *Chronicon Paschale* or *Fasti Siculi*, which unaccountably commits the blunders of making two consulships

out of one, they all unite in placing the consulship of Rubellius Geminus and Fufius Geminus, and together with it the evangelical "fifteenth year of Tiberius Caesar," in uninterrupted continuity before, and at the very door of the consulship of Vinicius and Longinus. That they all succeed in placing them in J. P. 4942 or 29 A. D., we do not affirm; for, according to Dr. Jarvis' own count of consulships, "Cassiodorus has given 211; Victorius 210; and Idatius 208. The list in the *Chronicon Paschale* [unfortunately defective, but emended by means of the indictions] makes up 208." (p. 283.) Which of the three calculations is right, or whether any of the three is right, will appear in the sequel.

In reviewing these ancient lists of consular administrations, we shall follow the tracks of Dr. Jarvis, only in reverse order, to the last ditch. We may say, in passing, that we consider this undertaking of ours no easy or toilless enterprise. It is not. It is rather a slow and tedious and onerous piece of work, somewhat in the nature of difficult, but very necessary trench-digging and counter-mining. It is hard and nerve-racking labor, but we hope in the end, it will give that feeling of dominant and abiding security which an easily gained shelter behind bushes and hedges cannot give. So let us make the best of it.

The procedure of Dr. Jarvis, to attack the intrenchment called "the infallible succession of consuls" from the rear, has the instant advantage of finding a perfect allignment of twelve teams of consuls, in all four of the lists, right from the beginning, while we, because we begin at the other end, shall not have that experience until the last. However, if we consider that, in the survey of Tiberius Caesar's regime, we have already alligned, at least six couples of consuls in advance, we, too, shall have a fairly good start. To offset our initial handicap, we shall have the inestimable benefit of an historical sequence of events, just as things happened, and not turned upside down.

After the decease of Livia, the emperor's mother, at the age of eighty-two years according to Pliny (B. XIV. C. 6), or at eighty-six according to Dio (*R. H. B.* LVIII. 2), in the latter half of the consulship of Rubellius Geminus and Fusius Geminus (A. D. 29), Tiberius indulged in a period of unbounded self-assertion both in regard to his private and his public life. For two years, embracing the consulates of M. Vinicius Quartinus and L. Cassius Longinus (A. D. 30) and of himself with Sejanus (A. D. 31), he struggled with his minister for the mastery, so that it appeared to Dio as it did to the rest of the world, that Sejanus was emperor of Rome, and Tiberius the autocrat of an island. In the end, however, near the close of their joint-consulship (October eighteenth, 31 A. D.), Tiberius outwitted Sejanus with the lure of partnership in tribunitian power, and so encompassed his

downfall and destruction, but not until that schemer had planted the seeds of death in the only son of Tiberius. The death of Drusus was accomplished, after an intermission of a whole year, the consulship of Domitius and Camillus Scribonianus, in the consular term of Serv. Sulpicius Galba and Lucius Sulla (33 A. D.); that of Agrippina, during the same year, on the anniversary of the day (October eighteenth) that freed the world from Sejanus two years before.

Passing as lightly over the consulship of Paulus Fabius and Lucius Vitellius (A. U. C. 785 [Varro 787] or J. P. 4747 = 34 A. D.) as Tacitus does over the re-appearance of the Phoenix in Egypt, we proceed to the administration of Caius Cestius and Marcus Servilius (A. U. C. 786 [Varro 788] or J. P. 4748 = 35 A. D.), when Vitellius, who had been consul in the preceding year, was given the command and administration of Syria, with powers to conduct war and to make peace. As Vitellius advanced with his legions, under pretense of invading Mesopotamia, the Parthian king fell for the feint, and, for fear of getting into a war with Rome, abandoned Armenia. The throne of Parthia becoming vacant, Vitellius marched to the aid of Tiridates, and with his whole force encamped near the Euphrates. Being informed that the river, without any fall of rain, was swelling miraculously above its banks, "a bridge of boats was quickly prepared, and the whole army passed over the Euphrates." (Tacitus, *Annals*, B. VI. C. XXXVII.) The royal treasure and the richest ornaments of the crown being delivered up to him, Vitellius considered his business as finished, and returned with his legions to Syria.

In the following year, which happened to be the last full twelve-month of consular administration under Tiberius, viz. the consulship of Quintus Plautius and Sextus Papinius (A. U. C. 787 [Varro 789] or J. P. 4749 = 36 A. D.), a tribe of people subject to Archelaus, king of Cappadocia, rebelled against being taxed according to the system practiced in the Roman provinces. "To quell the insurgents," says Tacitus (*Ann.* B. VI. C. XLI), Vitellius despatched Marcus Trebellius, at the head of four thousand legionary soldiers, and a select detachment of auxiliaries." How he himself spent the remainder of that year we do not know. "In a short time after (A. U. C. 788 [Varro 790] or J. P. 4750 = 37 A. D.), says Tacitus (*Ann.* B. VI. C. XLV), Cneius Acerronius and Caius Pontius entered on the consulship, and it was their lot to close the reign of Tiberius."

Before we join in the termination of the reign of Tiberius, it is still incumbent on us to consider two data of a vastly important chronological character. The first is the so-called solar eclipse of Phlegon the Trallion; the second, the death of Philip, the brother

of Herod the tetrarch (who, about the same time as the death of his brother), was ordered to Rome.

The eclipse of Phlegon, a freedman of Adrian Augustus Caesar, is not mentioned in any history of his own, but is cited only in the extracts made by other writers, such as Julius Africanus, Eusebius, and so forth. Even the original text of these extracts is not extant. The record is solely preserved in quotations and translations, which, accordingly, do not always agree. While the Armenian version of the *Chronicon* of Eusebius declares that the great eclipse mentioned by Phlegon occurred in the fourth year of the CCIII. Olympiad, the *Latin Version* of St. Jerome, the extract from the same *Chronicle* found in the *Chronographia* of Syncellus, and the account of the Passion of Jesus Christ given in the *Chronicon Paschale*, unite in saying that this eclipse of Phlegon occurred in the fourth year of the CCII. Olympiad. Now all would agree that, where such a preponderance of probability exists, there could be small hesitation as to which of the twain is the true reading. And all would be well if it were not for the fact that certain of the early church fathers attempted to capitalize on this eclipse. Thus Julius Africanus affirms in one place that "Phlegon relates that under Tiberius Caesar, *at the full of the moon, a total eclipse of the sun took place from the sixth to the ninth hour,*" and in another place, that it happened in "the *sixteenth* year of Tiberius Caesar, which was *the second year of the two hundred and second Olympiad.*" Now, aside from the fact that St. Jerome's version of this passage reads the *fifteenth* instead of the *sixteenth* year of Tiberius (which is, at least, consistent with his views elsewhere expressed), the specifications of the Olympiad do not agree. In like manner, John Philoponus, a grammarian of Alexandria (about 600 A. D.), is quoted by Syncellus as saying that "he [i.e. Phlegon] says that in the *second* year of the 202nd Olympiad, there happened an eclipse of the sun greater than all which had been known before"; while, according to Lardner, the same author may be cited as saying in another passage that the eclipse happened in the *fourth* year of the 202nd Olympiad. Again, John of Antioch, surnamed Malala, writing in his chronography of the crucifixion of Jesus *on the eighth before the kalends of April*, the twenty-fourth [twenty-fifth] of *March*, and the concomitant darkness, "the moon being *fourteen days old*, at the sixth hour of the day, it being the day of preparation," affirms that, "concerning this darkness, the most wise Phlegon, the Athenian, wrote in his own narrative as follows: '*In the eighteenth year of the reign of Tiberius Caesar, there happened an eclipse of the sun, greater than any which had before taken place,*' and it was night at the sixth hour of the day, so that the stars appeared." Yet he compares the eighteenth year

of Tiberius with the consulship of Sulpicius and Sola [Sulla or Sylla], which we have found to have corresponded to the nineteenth year. But the nineteenth year of Tiberius commenced almost simultaneously with the fourth year of the historical 202nd Olympiad, as also with the second year of Eusebius' hypothetical 203rd Olympiad, just as it was concurrent with the 780th year of the Nabonassan era. It is therefore evident that both definitions of the time when the eclipse of Phlegon is supposed to have happened aim at defining the same point of time in J. P. 4746 or 33 A. D. The confusion resulted from the introduction by Eusebius of a theoretical or academic line of Olympiads, which, though we shall find them exceedingly valuable when consistently followed through, were for all that merely theoretical, and not historical.

The eclipses of the period which Tacitus has termed the "era of a furious, headlong, and despotic government," that is, the period from the fifteenth to the twenty-third year of Tiberius, will prove that the dating of Phlegon's eclipse by the line of the historical Olympiads is absolutely correct. By the nature of the case the time for the occurrence of Phlegon's eclipse as well as the darkness at the crucifixion is narrowed down to the paschal season or lententide. But in all the years of this period there were no more than two natural obscurations of the sun which could by any possibility enter into our consideration. The first, that of March twenty-ninth, 32 A. D., is precluded from the start, being but partial and very inconsiderable; the second, that of March nineteenth, 33 A. D., was total, and obviously, the eclipse intended. Be that as it may, it is the only eclipse of the sun available, and it was, perhaps, for this reason that Dr. Seyffarth (*Chron. Sacr.*, p. 285 and *Summary of Rec. Dis.*, p. 186) compelled this veritable obliteration of the sun to do duty as the tremendous, prodigious darkness at the Crucifixion. This metachronistic writer indulges in the following proof of the pudding: "The solar eclipse of Dionysius Areopagita confirms that (i.e. the nineteenth of March, 33 A. D.) as the day of Christ's death with mathematical certainty. While travelling in Egypt and Aethiopia, this author was witness of an eclipse, at the sight of which he exclaimed: 'Now the Lord is suffering something.' This solar eclipse on the fourteenth of Nisan, i.e. on the nineteenth of March, could have taken place only in the year thirty-three after Christ; it occurred at two o'clock in the afternoon, consequently during the very same hours in which Christ expired on the cross. *It was, however, not at all visible in Palestine.*"

Of what "invaluable" service such an eclipse, however formidable as a natural phenomenon, can be to the cause of Christian chronology, is not for us to determine, at least, not at this time.

In the interest of chronology in general, however, we may say that the identification of the solar eclipse of Phlegon and Dionysius with the phenomenal obscuration of March nineteenth, 33 A. D., which places it beyond the shadow of a doubt in the fourth year of the 202nd Olympiad and in the consulship of Ser. Sulpicius Galba and L. Cornelius Sulla (A. U. C. 784 [Varro 786]) enables us to point out, not only the existence, but the availability, of an original rock-formation of a block of years, similar to that on which we laid the foundation of our system of chronology when we dealt with the Olympiads and the Athenian archonships. Now, whereas the present year is obviously one of three conspicuous points through which a perfectly straight line can be drawn, it follows that the number of consulships contained in the intervals between these points must conform in their quantity to the quantity of Olympiadic years, whether reduced to integers or bundled up in fours. Thus, the first well-authenticated Olympiad, subsequent to the chasm of confusion in Roman chronology, is the Olympiad attended by Herod the Great, the 193rd. This instance of Olympic celebration began in the summer of J. P. 4706 or 8 B. C. The 202nd observance of the games ended its quadriennium in J. P. 4746 or 33 A. D. Consequently $7\frac{1}{2} + 32\frac{1}{2} = 40$, and $(192 \times 4 =) 768 + 40 = 808$ —an even number of ten Olympiads or forty Olympiadic years, to which an even number of forty consulships must correspond, as we have found them to do: twenty-one under Caesar Augustus, and nineteen under Tiberius Caesar.

In the same way, the interval between the eclipse of Phlegon and the chronographic activity of Censorinus must correspond both in Olympic years and in consulships. The year of Censorinus being taken for granted as beyond all controversy the 4951st of the Julian Period, or the 238th year of the Christian Era, in the latter half of which he wrote and therefore reckoned it the 1014th year of the Olympic Games, or $[1014 \div 4 = 253 + 2]$ the second year of the 254th Olympiad, the interval amounts to $1014 - 808 = 206$ years, that is to say 206 consulates and 206 Olympiadic years, or $51\frac{1}{2}$ Olympiads. Since fifty-one full Olympiads plus two additional Olympiadic years cannot possibly result if a supernumerary consulship is inserted, as done by the anachronistic school, nor yet if two consular terms are suppressed, as is done by the metachronistic group, it is evident that the number of consulships between that of Sulpicius and Sulla and that of Ulpian and Pontianus must be exactly 206, and not 207, as demanded by Dr. Jarvis, nor 204, as required by Dr. Seyffarth. Thus the Olympiads, if now consulted, may act as an additional check on the correct enumeration and registration of the Roman consulships, which otherwise might not be considered, as by Epiphanius, "an infallible succession of consuls."

The other event of great chronological significance in the final period of Tiberius Caesar's reign, because of its bearing on the chronology of the Christian Era, is the death of Philip, the son of Herod the king, and brother of Herod the tetrarch, who was ordered to Rome by Vitellius, the governor of Syria. Josephus, the Jewish historian, defines the date as follows: "About this time it was that Philip, Herod's brother, departed this life, in the *twentieth* year of the reign of Tiberius, after he had been tetrarch of Trachonitis, and Gaulanitis, and of the nation of the Bataneans also, *thirty-seven years*." Is there a way of defining more closely what time this was?

According to a preceding paragraph (in *Antiq. B. XVIII. C. IV. §4*), "Tiberius sent a letter to Vitellius, and commanded him to make a league of friendship with Artabanus, the king of Parthia." The Roman historian, Tacitus, relates the transactions of Vitellius in Armenia and Mesopotamia as occurring in the consulship of C. Cestius Gallus and M. Servilius Nonianus (A. U. C. 786 [Varro 788], which consulship commenced on January first, 35 A. D., in the twenty-first year of Tiberius, and ended on December thirty-first, in the twenty-second year of the emperor. It was in the summer of this consulate (therefore near the close of Nab. 782₂₁) that the Parthian campaign brought Vitellius and his legions to the banks of the Euphrates, and that the participants in the parley on terms of peace met on the bridge of boats thrown across the river, which circumstance is mentioned by both historians. It was on the heels of this occasion, too, that Herod out-witted Vitellius in the speediness and obsequiousness of dispatch service to Rome. Vitellius did not wait long, "till he could be revenged on him." Scarcely had Philip, Herod's brother, "about this time" (probably in the winter of 35-36 A. D., and therefore in Tiberius' twenty-second year) departed this life, when Vitellius received orders from the emperor, in the ensuing consulate (that of Q. Plautius and Sex. Papinius, A. U. C. 787 [Varro 789] or 36 A. D.) to quell the insurrection of the Cliteans on mount Taurus, and in the next following term, the consulship of Acerronius and Pontius (A. U. C. 788 [Varro 790] or 37 A. D.) to war on Aretas, the king of Arabia Petrea, for having invaded the territory of Herod the tetrarch and destroyed all Herod's army, evidently in the summer campaign which preceded the winter-quarters of Vitellius' last expedition in 37 A. D. The death of Philip and the war between Herod and Aretas, therefore, took place in 36 A. D., in the consulate of Plautius and Papinius, which comprised parts of the twenty-second and twenty-third years of Tiberius, but under no circumstances a part or parcel of his twentieth year. Immediately upon the death of Philip, "*a year before the death of Tiberius*," consequently in the early spring

of 36 A. M., Agrippa, the son of Aristobulus, went up to Rome, while Herod and Aretas had their quarrel and resorted to arms in the course of that same year. The winter-quarters of 36-37 A. D. had scarcely been abandoned for the season, when Vitellius welcomed the opportunity to march through Herod's tetrarchy on his way to make war on Aretas and Arabia Petrea. How during his stay at Jerusalem he deposed Pontius Pilate, and deprived Joseph, who was called Caiaphas, of the high-priesthood, and how he disbanded his army on receipt of the news that Tiberius was dead, is not of moment now. The one thing to be remembered here is the fact that the death of Philip, Herod's son, occurred, not in the twentieth year of Tiberius Caesar, as Josephus misleadingly has it, but in his twenty-second year. Whether, in a similar manner, it was in the thirty-ninth year of his tetrarchy that he died, instead of the thirty-seventh, is not to be determined now.

While it is, no doubt, an onerous task to appeal everlastingly to a multitude of norms and standards, as we have done and are about to do even more abundantly, it is nevertheless in the interest of accuracy and the certainty of conviction resulting from such procedure that we put yet another test, or still more tests, to the trial of our endurance. This test will be the trying out of the Eusebian system of Olympiadic reckoning. In the course of its application it will be seen that, although it has no more than a scholastic value, it will be useful and profitable once the alignment has been established. Thus, for instance, it will be seen that the assignment of Caligula's reign to the 204th Olympiad is consistent with its other data, and may therefore assist in the correct location of that reign.

While the reign of Caius Caligula is perhaps not the most formidably fortified citadel of time, it is for all that sufficiently strong in its defences to defy any attempts of either anachronistic or metachronistic chronologers to raze or to reduce it. In the first place, it is strongly entrenched in the *Astronomical Canon*, being irreducibly lodged in the four Nabonassan years 784, 785, 786 and 787. The first of these years, Nab. 784, being almost perfectly bisected by the date of Tiberius Caesar's, both the beginning of Caligula's reign and of the consulate in which he began his reign, it is obviously impossible to move the date of his accession either up or down. In the second place, the period of Caligula's incumbency is so closely coincident with the whole of the 204th Olympiad that it is almost continuous with it. Both of them extend from 37 to 41 A. D. In the third place, the first year of Caius Caligula was the birth year of two historical characters, whose ages serve decidedly to fix and confirm the location of this reign—the natiivities of Nero, the later emperor of Rome, and

Flavius Josephus, the historian of the Hebrew people. The nativity of Nero, in particular, is definitely fixed, as Dr. Seyffarth informs us, by a planetary configuration found in the temple of Dendera in Egypt. It pertains to the *thirteenth day of April* (XVIII. Kal. Maias) of the year J. P. 4750 or 37 A. D., and is held to be a horoscope of some day in relation to the birth of Nero. If, to be exact, it referred to the very day of his birth, his death would fall into a suppositious thirty-second year of his age. If, on the other hand, it refers to his first motion or some other prenatal expression of his life, then, of course, it fixes only the year of his nativity, and we must look for the detail of his birthday to the historians. Now, Suetonius, the biographer of the Caesars, declares (*Nero C. 6*) that *Nero Claudius Caesar* "was born at Antium, *December fifteenth* (XVIII. Kal. Jan.) in the consulship of Acerronius Proculus and Pontius Nigrinus, nine months after the death of Tiberius." Tacitus, in his annals (B. XIII. S. X) reports that, at the very beginning of his reign, "a law was in agitation, by which the year was to begin with *December*, the month in which Nero was born." And just before this, speaking of the imminence of a war with the Parthians, Tacitus says (S. VI), "the popular opinion was, that Nero, young in life, *just out of his seventeenth year*, would not be equal to a conjuncture so arduous and important." If, then, Nero's birthday fell indeed in the middle of December or on the XVIII. of the Kalends of January, 54 A. D., seventeen full years carry us back to the middle of December 37 A. D., and that would be nine months after the death of Tiberius, and three-quarters of the first year of Caligula's reign.

In like manner, though in less measure, the age of Josephus serves to reinforce and corroborate the chronology of the times. If, in any degree, it is certain that the Jewish war, in which Josephus played so active a part, and in which he participated when he himself was thirty years of age, was precipitated upon his luckless people in the twelfth year of Nero, or in A. D. 66, then it is certain that the full years of Josephus' age began with his natal day somewhere in the spring of 37 A. D., which twelve-month is thus declared by him to have been the first year of Caligula's reign.

The reign of Caius Caligula, then, began with the consulship of Cn. Acerronius Proculus and C. Pontius Nigrinus, whose lot it was to administer the consular office when the tyranny of Tiberius was ended on the sixteenth of March, according to Suetonius, or on the twenty-sixth of March, according to Dion Cassius. Since all agree on the date of his death, on the twenty-fourth of January, in the fourth year of his government, we may assume that his reign comprised four complete consulships. Josephus, who

lived nearest to the lifetime of Caligula, describes his reign as "four years within four months," just as Ptolemy's *Canon*, Aurelius Victor, and the *Chronicon Paschale*, say only, in round numbers, "four years." Since, however, it is at this very point, the reign of Caligula, that the later-occurrence system of chronology suppresses a consulship in order to bring ancient history one year down *here* (and the other in the reign of the elder Vespasian), it is imperative that we pry closer into the actual duration of this reign.

The biographer of the Caesars, Suetonius, states (C. LIX) that, when Caius Caligula died in the twenty-ninth year of his age, he had reigned "three years, ten months, and eight days." The Christian church father, Clement of Alexandria, and the pagan historian Eutropius, agree with Suetonius on the same figures, as also does Cassiodorus with the exception of the "eight days," while Theophilus, more in accord with Josephus, computes the exact length to have been "three years, *eight months*, and *seven* days." But even with this discrepancy of two months and one day, the duration of his reign compels the enumeration of three complete consular terms in addition to the three-quarters of a consular year with which he began his reign. Having taken his uncle Claudius, for his colleague in his first consulship, which lasted only two months from the Kalends (first) of July to the anniversary of his birthday on August thirty-first, 37 A. D., he himself held the consulship three times beside this suffect term. The first, as stated: "the second," as Suetonius enumerates them, "from the Kalends of January for thirty days; the third, until the Ides [thirteenth] of January; and the fourth, until the seventh of the same ides [seventh of January]. Of these, the two last he held successively." Now, conceding that the fourth term of his consular administration pertains to the small fraction of a week in January, 41 A. D., it must be admitted that the third term pertains to the year immediately preceding it (for the "two last" were held in succession), and that the second term must apply to either 39 or 38 A. D. It might be inferred from the last words of Suetonius that only the last *two*, not three, consulships succeeded each other without intermission, but, as it is, all of the ancient consular lists, of Cassiodorus, Victorius, Idatius, and the *Chronicon Paschale*, combine the force of their testimony in placing the consuls Julianus and Asprenas in immediate succession to Proculus and Nigrinus, while two of them, Cassiodorus and Victorius, substitute Publicola and Nerva for Caligula II. and Caesianus; the other two, Idatius and the *Fasti Siculi*, give Caesar II and Caesianus (or Cersianus). Besides, a natural subdivision of this short reign, into the "first two years of magnanimity," as Josephus calls it, and the "last two years of

monstrosity," as we might call it, elicits the obvious conclusion that, if there ever was a time when Caius Caligula was magnanimous enough, not only to tolerate the administration of the consular office by other men, but even to permit the intervening consulate to take the name and title of anyone but himself, it must have been during the second year of his magnanimous moderation and good sense. Assuming, then, that his second assertion of his expanding ego stood in immediate precedence to his third and fourth consulship, rather than that he permitted a displacement of himself in his period of self-exaltation, we may line up the consulates belonging to this reign in the following order:

<i>A.U.C.</i>	<i>Ol. (Eus.)</i>	<i>Consuls.</i>	<i>Nab. J.P. or A.D.</i>		
788—790	204 ³	Cn. Acerronius Proculus; C. Pontius Nigrinus	784 ¹	4750	37
789—791	204 ⁴	M. Aquillius Julianus; P. Monius Asprenas	785 ²	4751	38
790—792	205 ¹	C. Caligula II; L. Apronius Caesianus	786 ³	4752	39
791—793	205 ²	C. Caligula III (solus)	787 ⁴	4753	40
792—794	205 ³	C. Caligula IV; Cn. Sentius Saturninus	788 ¹	4754	41

It is a remarkable little coincidence that the very consulate, the existence and seriation of which we have just established, is the only one honored for a long time with a designation of its year number according to the computation used in the days of the republic in real, every-day life, that of the Capitoline Marbles. The number as well as the name of this consulate is correctly given by Frontinus (*de Aquae Ductibus*, art. XIII. ed. Petav. p. 49): "*M. Aquillio Juliano, P. Nonio Asprenate coss., anno urbis conditae DCCLXXXVIII* [789]." This little "it just so happens" may not be ranked, perhaps, as a providential arrangement, yet it is significant enough that just this consulate is singled out and stressed as if with special emphasis for our satisfaction and complete assurance.

Beside this categorical succession of consuls, and the consistency and symmetry of the Olympiads, and the mathematical certainty of astronomical configurations, there are still some more subsidiary means of strengthening the chronological position of the reign of Caius; first, the age of the emperor, as a well-known quantity; then the regnal years of one of his vassal kings.

According to Suetonius, Caius Caligula died in the twenty-ninth year of his age, on the twenty-fourth of January, in the year which legally bore the index and title of his own fourth consulship, which, however, he had resigned on the eighteenth day before his death. Twenty-nine years before this the 4754th year of the Julian Period or the forty-first year of the Christian Era, we come

to the point of time when Caius Caesar Caligula was born, (41-29=) 12 A. D., or (4754-29=) 4725 J. P. "Caius Caesar was born," says Suetonius (Cal. VIII.), "on the day before the Kalends [thirty-first of August] of September, at the time his father [Germanicus] and Caius Fonteius Capito were consuls." Now, whether we check off twenty-nine years on the scale of the Julian Period, beginning at the middle of 4725 or 12 A. D., or on that of the Nabonassan Era, or on that of the Olympiad years, commencing with the fourth year of the 197th Olympiad, the end of the count will take us, respectively, to the year 40-41 A. D., Nab. 788, or Olymp. 204.⁴ It is therefore absolutely certain that the commonly accepted chronology is correct, and that no consular term can be omitted from the reign of Caius.

The other line of calculation which may be considered ancillary, at least, to the general allocation of Caligula's reign, is the date of the deposition of Herod Antipas. At first blush it may appear that this line of evidence requires itself to be determined more accurately before it can be put to work to fix or confirm the date of any other happening. But there are in this line at least two points of contact with other lines of evidence at which, and by which, contemporary events may be definitely established. In the case of Herod Antipas, his regnal years ran parallel and therefore comparable with those of his two brothers, Archelaus and Philip, who respectively as king of Judea and tetrarch of Trachonitis, began to reign at the same time with Herod Antipas. In the first place, there can be no doubt that Herod the Great's three sons were appointed to their vassal kingships by Augustus Caesar some time after Pentecost in the year when Herod died, and after a voyage to Rome had been made by Archelaus and Philip (hence in the height of the summer after king Herod's death), as narrated by Josephus (*Antiq. B. XVII. C. XI. §4*): "A few days afterwards he [Augustus] appointed Archelaus, not indeed to be king of the whole country, but ethnarch of one half of that which had been subject to Herod. . . . But as for the other half, he divided it into two parts [fourths, hence called tetarchies], and gave it to two other of Herod's sons, to Philip and to Antipas," etcetera.

When, or in what year of any other era, this inauguration of Herod's sons took place, may be derived from the date of the banishment of Archelaus and the decease of Philip, Herod's brother. The former, as king of Judea, was impeached by his subjects and tried by Cyrenius in the ninth year of Archelaus' kingship, which corresponded to the thirty-seventh year of [Augustus] Caesar's victory over Antony at Actium, and, upon his condemnation in the beginning of his tenth year, was sent into exile in the thirty-eighth year of the Actiac Era. The era of the

victory at Actium began on the twenty-seventh of March, 29 B. C.; consequently the thirty-seventh year of Actium ended on the twenty-sixth of March, and the thirty-eighth year began on the twenty-seventh of the month, in the same year 9 A. D., and since the ninth year of Archelaus ended, and his tenth year began in the summer of that year, the regnal years of Philip and Antipas terminated and commenced at the same time. This being so, the thirty-seventh year of both Philip and Antipas began in the summer of 36 A. D. and ended in the summer of 37 A. D. The years of Herod Antipas, who alone of the three brothers, lived beyond this point, extended, according to Josephus, to the forty-third. The question, therefore, is, when was it that Herod Antipas was definitely deposed and deprived of his kingdom?

If we consistently follow the consecutive order of Herod's regnal years, the forty-third will land us in the middle of J. P. 4755 or 42 A. D., the second year of Emperor Claudius. Now in the second year of his government, which was also the second consulship of Claudius, it is true, this emperor did "confirm to Agrippa that kingdom which Caius had given him," but Antipas must have been banished before this, since he was banished by Caius. The regnal years of Agrippa, the beneficiary of Herod's banishment, will throw the necessary light on the deposition of Herod Antipas.

No sooner had Tiberius Caesar laid down the reins of government, than Caius Caligula felt instantly "much disposed," as Josephus has it (*Antiq.* B. XVIII. C. VI. §10), "to set Agrippa at liberty that very day. . . . However, there did not many days pass ere he. . . appointed him to be king of the tetrarchy of Philip. He also gave him the tetrachy of Lysanias, etcetera. Now, in the second year of the reign of Caius Caesar, Agrippa desired leave to be given him to sail home, and settle the affairs of his government. . . . So, upon the emperor's permission, he came into his own country, and appeared to them all unexpectedly as a king." With this account of his inauguration agrees the resume of his reign, as given by the same historian at the time of Agrippa's death (*Antiq.* B. XIX. C. VIII §2). "He departed this life," says Josephus, "in the *seventh* year of his reign,; for he reigned FOUR YEARS under Caius Caesar, three of them were over Philip's tetrarchy only, and on the *fourth* he had that of Herod [Antipas] added to it." More need not be said. The *fourth* year of Agrippa, of course, corresponded perfectly to the *fourth* year of Caligula, since both began virtually on the same day. But the fourth year of Caligula fell together with the forty-first year of Antipas. If, then, it is nevertheless true that a coin exists which commemorates the forty-third year of Antipas (see Eckhel, 7, 3, pp. 486 sqq.), this can only mean that the actual possession of Herod's

kingdom was not confirmed to Agrippa until the forty-third year of Antipas, or the second regnal and consular term of Claudius Caesar in 42 A. D. The loyal subjects of Herod Antipas may have continued to strike the series of coins bearing his name and the count of his regnal years, but his deposition and deprivation of his kingdom took effect in his forty-first year, which was the last year of Caius Caligula. Whatever the cause, there must have been some reason for the postponement of Agrippa's confirmation in his kingdom until the second year of Claudius as emperor and consul. But whatever the reason, this much is certain that, if the final deportation or exile of Herod Antipas in his forty-third year was bound to coincide with the second consular and regnal year of Claudius Caesar, the reign of Caius Caligula cannot be deprived of a year's duration without affecting the whole chronology of the times. So far, therefore, as the contention of the metachronistic school is concerned, that an entire twelvemonth must be omitted from the reign of Caligula, there is not a shred of evidence in its favor.

While still more arguments might be adduced to confirm and corroborate the conclusion that the reign of Caius Caesar surnamed Caligula, (such as from the commencement of Claudius' second consulship after four years time, and the embassy of Alexandrian Jews, headed by Philo, etcetera), is rightly placed as it is, according to the common consent of the best chronologists of our times, these which we have adduced ought to be sufficient to insure the most complete confidence in the result. We may, therefore, proceed to the next imperial reign, that of Tib. Claudius Drusus Caesar.

About the length or duration of this Claudian reign there is no difference or variation of opinion. The only trouble is that, by Dr. Jarvis and others of his following, the entire block of fourteen years is moved up bodily the space of twelve months, while, by Dr. Seyffarth and his followers, it is pressed down an entire year. But should it be moved either way? If we neither misread nor disuse the *Astronomical Canon*, but read this magnificent standard of time-reckoning aright, we do not go amiss if we accept the canonical assignment of the years Nab. 788 to 801 as the natural, historical place for the reign of Claudius Caesar. We shall show, as in the case of all the preceding emperors, by the coordination of terrestrial events in their relation to celestial phenomena as well as by other chronological arguments, that the fourteen years ascribed to Claudius in the *Astronomical Canon*, cannot by any possibility be displaced either up or down, but must be allowed to remain where they are unto the end of time.

As in the foregoing reign of Caligula, the very first year of Claudius is, in addition to its astronomical allocation, defined and decisively fixed by an historical reference, the life limitation of

Titus, the second of the Flavian emperors of Rome. Suetonius, his biographer (*Titus* C. 1), narrates that Titus, having succeeded his father in the government two years, two months, and twenty days, "he died on the ides of September (September thirteenth, 81 A. D.), in the forty-first year of his age." If, then, Titus was born forty-one years before 81 A. D., he was born, as Suetonius says, "on the third before the Kalends of January, of that year which was rendered memorable by the assassination of Caius." Taking, therefore, the January here spoken of to be that IN which Caligula was killed, not that of the year *before* nor that of the year *thereafter*, we cannot recognize the relevancy of any other date as the birthday of Titus but the twenty-ninth of December, the third before the Kalends of January, J. P. 4753 or A. D. 40. It is therefore also self-understood that the first consulate of Claudius' reign should be indexed and entitled: Caligula IV and Saturninus.

Respecting the consulships administered by the fifth emperor of Rome, Suetonius tells us that, after Claudius had held the first consulship jointly with his nephew for two months [July and August in 37 A. D.], "a second consulship was allotted to him, to commence at the expiration of the *fourth* year." Accordingly he entered upon his second consular term (not in 41 or 43, but) in 42 A. D., and again, and again, several times, at the expiration of four years. We have therefore a regular checking system of his own to be applied to the years of his reign. "Besides his former consulship [the first], says his biographer, "he held the office afterwards four times: the first two [i.e. the second and third] successively, but the following [fourth and fifth], after an interval of four years each." Whether, according to this scheme, he wished to concur with the Eusebian system of Olympiads, or not, the pivotal years of his reign must be: 42 and 43 A. D., 47 A. D., and 51 A. D.

That the four consulates of Claudius cannot pivot on the years 41—42—46—50 A. D., nor yet on those of 43—44—48—52, will become apparent from the coordination of the central term, that of Claudius IV. and Vitellius III. All four of the consular lists,—Cassiodorus, Victorius, Idatius, and the *Fasti Siculi*, together with Tacitus and Dion Cassius—agree on giving the following couples as leading up to the central point:

<i>A. U. C. (Varro) Ol. (Eus.)</i>		<i>Consuls.</i>	<i>Nab. J. P. or A. D.</i>		
793—795	205 ⁴	Claudius II ; C. Caecina Largus	789 ²	4755	42
794—796	206 ¹	Claudius III ; L. Vitellius II.	790 ³	4756	43
795—797	206 ²	L. Quinctius Crispinus II; M. Statilius Taurus	791 ⁴	4757	44
796—798	206 ³	M. Vinicius II; Statilius Corvinus	792 ⁵	4758	45
797—799	206 ⁴	Valerius Asiaticus II ; M. Junius Silanus	793 ⁶	4759	46

All consular lists, with the exception of the *Chronicon Paschale* or *Fasti Siculi*, and with a few transpositions of no consequence, agree in bringing up the rear with the following administrations:

A. U. C. (Varro) Ol. (Eus.)		Consuls.	Nab. J. P. or A. D.		
798—800	207 ¹	Claudius IV; L. Vitellius III.	794 ⁷	4760	47
799—801	207 ²	Aulus Vitellius; L. Vipsanius Poplicola	795 ⁸	4761	48
800—802	207 ³	Q. Veranius; A. Pompeius Gallus	796 ⁹	4762	49
801—803	207 ⁴	C. Antistius Vetus; M. Suillius Nervilius	797 ¹⁰	4763	50
802—804	208 ¹	Claudius V; Ser. Cornelius Orphitus	798 ¹¹	4764	51
803—805	208 ²	P. Corn. Sulla Faustus; L. Salvius Otho Titianus	799 ¹²	4765	52
804—806	208 ³	Decimus Junius Silanus; Q. Haterius Antoninus	800 ¹³	4766	53
805—807	208 ⁴	M. Asinius Marcellus; M. Acilius Aviola	801 ¹⁴	4767	54

These serried ranks of consular teams, it would seem, ought to operate, by their very show of solidarity, toward creating the impression that this block of consulships is too firm and solid to be moved either hither or thither. But we have evidence to prove that it cannot. About this time, say Dion Cassius, Seneca, Eusebius, Aurelius Victor, and Cassiodorus, a seismic disturbance occurred, in which an island, hitherto not in existence, arose in the Aegean sea, near Thera; and on the same night, Victor informs us, there was a remarkable eclipse of the moon. Seneca says that these prodigious phenomena occurred in the consulship of Valerius Asiaticus; Dion Cassius, however, in that of Claudius IV and L. Vitellius III. Now, it is possible that the lunar obscuration referred to may have happened in either one or the other of these consulships, in neither one nor the other, or in both of them put together, if it can be shown that there was just such a conjuncture of Roman consular years which made it possible for a darkening of the moon to take place in two adjoining consulships at the same time. Such a conjuncture, it must be admitted, should have exceptional value as evidence concerning any incident or circumstance brought into connection with it. Now, here is an eclipse after an earthquake said to have happened at a point of time which could be included in two different consulates at one and the same time. Surely an event which could not have happened in any old year! What eclipses of the moon obscured that planet within the possible and suppositious range of three years? None whatever in 45 A. D. The slight obscuration of June twenty-sixth, 47 A. D., selected by Dr. Seyffarth, cannot possibly combine two index consulates, such as are named by Seneca and Dion Cassius. There is only one possibility left, and that is in 46 A. D. There was a phenomenal darkening of the moon on the thirty-first of *December*, 46 A. D., which day was also described in the Roman calendar as the "pridies" of *January*, and corresponded to both historians' accounts. It occurred at half-past

nine in the night of the abdication day of the past year's consuls, Asiaticus and Silanus, and on the eve of the inauguration day of the new year's consuls, Claudius and Vitellius. Being central and total, it may well have appeared a portentous eclipsing of the former's power by the overshadowing authority of the latter, and both being covered by the selfsame darkness, the historical sequence and canonical coordination of these two consulships is established with an almost providential infallibility, a degree of certainty seldom attained by a purely human synchronization. It is a marvel that it could ever have been doubted.

Another means of riveting down the entire Claudian reign to this one and only location on the scale of time is the old approved system of Olympiadic time-reckoning. By virtue of its consistent seriation and, consequently of its mathematical certitude, the Olympic enumeration of these quadriennial games constitutes one of the most reliable and trustworthy chronological counts. According to Solinus (I. 29; see Clinton's *F. H.*, I, p. 150), the 207th Olympiad fell within the consulship of Gallus and Verannius, who were invested with that office in A. U. C. 800 [Varro 802] or J. P. 4762=49 A. D. That the Olympic reckoning was not at fault may be seen by a simple test in arithmetic. 206 Olympiads or 824 Olympiad years having before this elapsed since the first celebration in J. P. 3938 or 776 B. C., the 207th observance of the athletic feast is correctly chalked down as falling into the summer of J. P. 4762 or 49 A. D. Thus $3938 + 824 = 4762$. But if the 207th Olympiad is correctly located in July A. D. 49, and the consulship extended an equal distance of six months *before*, and six months *after*, the first of July, then the thus equally divided consulate can be located nowhere else but in 49 A. D. And if this consulate of Gallus and Verannius cannot be lodged or quartered in any other niche of time, then the series of which this is an irrefrangible part, stands unmoved and immoveable unto the end of time.

There are still more ways and means of solidifying the chronological period known as the reign of Claudius, but, seeing that three or four of the events that happened in this period must be taken up for a special purpose later, namely, to verify the construction of our proposed Syro-Macedonian (or Jewish) Calendar, we shall limit our inquiries here to one incident in the former half, and two events in the latter.

The incident to be considered in the former half of Claudius' reign affords an opportunity to fix the date of a privilege granted the Jewish kings, which had been temporarily taken away from them—the privilege of keeping the holy vestments of the Temple in their custody, instead of yielding them up, after each feast, to the keeping of the Roman procurator. It was granted after the

death of the elder Agrippa to Agrippa Junior, who was a great favorite at the court of Claudius. Agrippa the Great had died after he had reigned "three years under the reign of Claudius," while Agrippa Junior had not yet begun to rule, being, at that time, as Josephus says, in his *Antiquities*, "a youth in the *seventeenth* year of his age," but in his *Jewish War*, "a very young child." (B. II. C. XI, §6) He was therefore retained at court, until, on the death of his uncle, Herod of Chalcis, "Claudius Caesar bestowed his dominions [and emoluments] on Agrippa Junior" *in the eighth year of his reign* (*Ant.* XX. V. §2). Whatever therefore happened in regard to the prerogative mentioned, happened between the third and the eighth regnal years of Claudius. Josephus relates (*Ant.* B. XX. C. 1, §2) that the emperor, upon the entreaty of Agrippa for this favor, granted the request, and guaranteed it in the following letter: "Claudius Caesar, Germanicus, tribune of the people the *fifth* time, and designed consul the *fourth* time, and imperator the *tenth* time, etc., sendeth greeting.... I grant their request, as that excellent person Vitellius... has done before me.... Now I have written about these affairs to Cuspius Fadus, my procurator.... This is dated *before the fourth of the kalends of July, when Rufus and Pompeius Sylvanus are consuls.*" Now, from his third consulate in 43 A. D. till 47 A. D., when he became acting consul for the *fourth* time, the emperor was *designated* or pre-appointed consul. Being tribune of the people the *fifth* time, he dictated the above document some time after the twenty-seventh of June 45 A. D., and being imperator the *tenth* time, must have entered on the tenth semi-annual period of imperial power on the same date (V. Kal. Jul.), the twenty-seventh of June, 45 A. D. Seeing that the letter is dated on the day following, it follows that the privilege of keeping the Temple attire in native Jewish custody was granted on the twenty-eighth of June, 45 A. D., at a time when substitute consuls, by the name of M. Cluvius Rufus and Pub. Pompeius [Pomponius or Poppaeus] Silvanus were acting as such, while the year-term itself was known as the consulship of M. Vinicius II. and Statilius Corvinus. As no other arrangement can marshal and collocate these data—the fifth year of tribunitian power, the provisional fourth consulship, the tenth semi-annual imperial period, and the consulship of Rufus and Silvanus—in their inviolate order and serial sequence, we may rest assured that the regnal years of Claudius Caesar are correctly located as commonly received.

The second event which we wish to take note of occurred about the very middle of the reign of Claudius, or, to be more precise, in the sixth and seventh year of his reign. Tacitus, in his *Annals* (XI. 25), remarks that, when Vipsanius was consul

(A. U. C. 799 [Varro 801] or J. P. 4761 = 48 A. D.), Claudius closed the lustre of *five years*, and made a survey of the people." This date does not agree with that of Pliny, who figures that the Claudian census occurred in A. U. C. 800 (Varro), nor with Cassiodorus, who assumes that it happened in the sixth year of Claudius, the consulship of Asiaticus and Cornelius (Corvinus). Eusebius, in his *Chronicle* (II. p. 373) even places the census at the fifth year of Claudius, or the second year of the 206th Olympiad (45 A. D.). Now, if what is ascribed by Eusebius to the second year of the hypothetical 206th Olympiad is transcribed to the second year of the historical 206th Olympiad, it will be observed that the census and lustrum negotiated by Claudius have been safely and satisfactorily transferred to their proper places. They will be then intrenched in the sixth to seventh years of Claudius; in other terms, the census in the consulship of Valerius Asiaticus and M. Silanus Corvinus [J. P. 4759 or 46 A. D.], and the lustrum in the consulship of Claudius IV. and Vitellius III. [J. P. 4760 or 47 A. D.). That Tacitus, too, should agree with this date, appears from his agreement with Pliny in the computation of the years of the City. "*During the same consulship,*" he says, "in the year of Rome *eight hundred*, the secular games were celebrated, after an interval of *sixty-four years* since they were last solemnized in the reign of Augustus." If, then, Tacitus employs the same computing system as Pliny [the Varronian], the events imputed to the same point of the system must also be the same. We, therefore, conclude that the solemnization of the census called the "lustre," or the dramatic consummation of the survey of the people, occurred in the seventh, not the eighth, year of Claudius, in the second year of the 206th Olympiad of the old historic line, and in the year of Rome 800, according to the theoretical reckoning of Terrentius Varro. But this harmonization of disparate data would not be possible if the reign of Claudius could be dislodged from its proper place either by moving it a year higher up or by moving it a year lower down.

While on the subject of the diverse reckonings of the Era of Rome, we may as well establish the fact that where there are variations or diversities in the reckoning, there are bound to be aberrations from the truth. It is therefore not to be wondered at that there should be errors even in so careful a writer as Tacitus. "*During the same consulship,*" says he (*Ann. B. XI. S. XI*), "in the year of Rome *eight hundred*, the secular games were celebrated, after an interval of *sixty-four years* since they were last solemnized in the reign of Augustus." This is the error, and this the reason. "The chronology observed by Augustus differed from the system of Claudius." The chronology of Augustus, as we have seen, was that of the Capitoline Marbles, which registered

the year of Rome at the time of the Augustan Secular Games as 736 A. U. C. The system of time adopted by Claudius and other Roman emperors was the computation evolved by Terrentius Varro, which was not only an invention, in that it was unused and unknown before Varro's day, but an innovation for the worse, in that its interpolation of two substitute consulships in lieu of regular terms of office vitiated and invalidated all calculation by its count; for instance, in rolling up a round 800 years from the foundation of Rome to the Claudian Secular Games when the number could only be 798. Hence also $736 + 64 = 800$!

In order, however, to avoid even the appearance of a querulous stickling for the correct expression of chronological forms and phrases, we shall, in the future, switch over to the fictitious and fallacious system of Varro, not because of any superior merit or deserving character, but because of its vogue in fact due to its actual preferment by the Roman emperors and its subsequent predominance among all classes. We shall have occasion to revert to the old-time Capitoline computation only four or five times, when it ceases and sinks into oblivion forever. In lieu of the old we shall henceforth use the new. And using it, (what from now on is a consistent, officially recognized and historically well-authenticated seriation of Roman years), with equity and fairness (if not with affection), we shall now register its first use in our essay to establish the reign of Claudius.

Tacitus, as we have seen, relates that the Secular Games were celebrated "*in the year of Rome eight hundred, during the same consulship*" of Claudius IV. and Vitellius III, making the 800th year from the foundation of the City according to Varro coincident and co-ordinate with the 4760th year of the Julian Period or the forty-seventh year of the Christian Era. Censorinus, using the same system of computation by Varro, as we well know, makes the 991st year from the foundation of Rome commensurate with the 4951st year of the Julian Period or the 238th year of the common Christian Era. The fourth consulship of Claudius and third of Vitellius, during which the Secular Games were revived, must have occurred in the 192nd year before the writing of Censorinus, for 192 from 991 A. U. C. (Varro), when Censorinus wrote, leaves 799, the number of years elapsed in the computation of Varro before the revival of the Secular Games under Claudius. But if the 192nd year before Censorinus correctly locates the 800th year A. U. C. according to Varro, it must necessarily coincide with the 4760th year of the Julian Period or the forty-seventh year of the common Christian Era, for $4951 - 192 = 4759$, the number of Julian years preceding the consulship of Claudius and Vitellius, or $238 - 192 = 46$, the number of Anno Domini years precursory to the Secular Games. But if the fourth

consulate of Claudius and third of Vitellius is correctly placed in the scale of time by means of the Varronian computation of Roman years, then the whole reign of Claudius with its concomitant consulates must remain unaltered and unchanged in the place assigned to it by the happenings of the day.

Another event of some consequence that occurred in the reign of Claudius Caesar, is the birth of T. Flavius Domitianus, the third Roman emperor of the Flavian family. He was born, as his biographer Suetonius informs us, upon the ninth of the Kalends of November [October twenty-fourth], when his father was designated consul [or consul elect], being about to enter upon his office the following month," and lived, according to Dion, "forty-four years, ten months, and twenty-six days." If, then, Domitian was slain "in the forty-fifth year of his age," as Suetonius has it, "on the eighteenth of September (XIV. Kal. Octob.), A. D. 96, forty-five years back from 96 A. D. [$96 - 45 = 51$ A. D.] will carry us back to 51 A. D., when Vespasian the elder served as extraordinary consul in the months of November and December, in the year denominated the consulship of Ti. Claudius V. and Ser. Cornelius Orphitus. The age of Domitian, therefore, goes to prove that a suppression of a consulate, during this entire period (including Domitian's reign as well as Claudius', Nero's, and Vespasian's), is not permissible. The basis on which the school of metachronistic chronologers found their system, is hereby shown to be *nil*.

The coryphaeus of this metachronistic school, Dr. Seyffarth, informs us that the concluding year of Claudius Caesar's reign, 54 A. D., was signalized by a planetary configuration relative to the birth of Trajan, the later emperor of Rome. "Two hundred years ago a magnificent bronze tablet or plate, inlaid with a great many silver figures of the gods, was dug up in the city of Rome, . . . A closer examination . . . , however, led to the conclusion that this table represented in its twelve squares nothing more than the twelve signs of the Zodiac, expressed by means of the twelve superior deities of the Egyptians, and that it furthermore contained in certain squares or signs the figures of the seven Kabiri or planets. It was thus found that this table exhibits the planetary configuration of the year 54 A. C., *in which year Trajan was born*. And it actually contains the names: Caesar Trajanus and those of his wife and daughter, Platina and Sabina. For a fac-simile of the Tabula Bembina [the name of the bronze plate or tablet] and the explanation of the whole, see my *Astronomia Aegyptiaca*, Tab. VIII. (Dr. G. Seyffarth *Summary of Recent Discoveries*, etcetera.) This planetary configuration, if it could be vindicated by original data supposed to have been commemorated in Trajan's horoscope, would no doubt go a

great way toward the establishment of Claudius' and Nero's reign in the position assigned to them by the commonly accepted chronology if we were in possession of such data. In default of them, we may proceed to the consideration of other data confirming and consolidating the regnal years of the two Julian emperors whose combined duration is said to have equalled that of the three Flavians.

There is hardly a mode or method of demonstration in vogue in chronological inquiry which may not be employed to advantage in the survey and settlement of Nero's reign. The primary assignment by Ptolemy's *Canon* may be supplemented and consolidated with records of eclipses. The succession of consuls supplied by a quadriga of consular lists may be supported and corroborated by the official records of the Capitoline Marbles. The correlation of the Olympic Games, personally participated in by the emperor, may be expanded and reinforced by the inter-ramifications of private pedigrees and family trees. In short, we may use one and all of these ways and means of solidifying and stabilizing an epoch, if by so doing we may remove the last vestige or suggestion of doubt. To this end we shall proceed with a recitation of the fourteen teams of consuls embraced in the count of Ptolemy's *Canon*.

U.C.(Varro) (Ol. Eus.)		Consuls.	Nab. J.P. or A.D.		
806—808	209 ¹	Nero Claud. Imp. Aug.; L. Antistius Vetus	802 ¹	4768	55
807—809	209 ²	Q. Volusius Saturninus; Pub. Cornelius Scipio	803 ²	4769	56
808—810	209 ³	Nero Claud. Imp. Aug. II.; L. Calpurnius Piso	804 ³	4770	57
809—811	209 ⁴	Nero Claud. Imp. Aug. III; Val. Messala Corvinus	805 ⁴	4771	58
810—812	210 ¹	C. Vipstanius Apronianus; L. Fonteius Capito	806 ⁵	4772	59
811—813	210 ²	Nero Claud. Imp. Aug. IV; Corn. Cossus Lentulus	807 ⁶	4773	60
812—814	210 ³	Caesonius Paetus; Petronius Turpilianus	808 ⁷	4774	61
813—815	210 ⁴	Pub. Marius Celsus; L. Asinius Gallus	809 ⁸	4775	62
814—816	211 ¹	L. Virginus Rufus; C. Memonius Regulus	810 ⁹	4776	63
815—817	211 ²	M. Licinius Crassus Frugi; C. Laecanius Bassus	811 ¹⁰	4777	64
816—818	211 ³	A. Licinius Nerva Silianus; M. Atticus Vestinus	812 ¹¹	4778	65
817—819	211 ⁴	C. Lucius Telesinus; C. Suetonius Paulinus	813 ¹²	4779	66
818—820	212 ¹	L. Fonteius Capito; C. Julius Rufus	814 ¹³	4780	67
819—821	212 ²	C. Silius Italicus; M. Gal. Trachal. Turpilianus	815 ¹⁴	4781	68

By way of verifying the disposition of these fourteen consular terms, let us first of all single out the consulships of Nero, the emperor. "He filled the consulship four times." Not, indeed, four times in succession, without intermission, as Cassiodorus and Victorius have it, but, as Suetonius (S. XIV) says: "the two intermediate ones he held successively, but the others after an interval of some years between them"; that is to say, a one-year's interval between the first and the second, and another one-year's interval between the third and the fourth, making it a four-year's interval between the first and the fourth consulship. That the uninterrupted seriation of the two churchmen must be a mistake, might be inferred from the mere fact that, without complementary consulships sometime or somewhere, theirs would be a succession of only eleven consulships, a shortage countenanced by no one else, and contrary to every mode of computing the years of Rome. Take, for instance, as a standard of measurement, the count of the Capitoline Tablets, as they are employed perhaps for the last time, by Frontinus. According to this count, we have 811 for the sixth year of Nero; 814 for the ninth; 815 for the tenth year; and 819 for the fourteenth and last. In arithmetical consistency, none of these regnal years or consular terms could be considered correctly counted (i.e. enumerated or numbered), if there really had been no more than just eleven consulships. But that there were, as there must have been, at least, two more beside the four consulships of Nero, is not only so affirmed by Suetonius, but is so figured out by Tacitus when, speaking of the fifth consulship of his reign, that of C. Vipstanius and L. Fonteius (J. P. 4772 or 59 A. D.), he declares: "He had gained *in four years* a taste of power;" which *four years*, of course, could not have been condensed in only three Neronian consulships before this, since the fourth term of Nero was even posterior to that consular year in which he ventured to take that "daring stride in guilt"—the murder of Poppaea.

Assuming, then, as certain that there was an interstice of a year between the third and fourth consulships of Nero, as there had been one between the first and second, we shall advance a little more convincing argument that this intervening consulate is correctly placed in J. P. 4772 or 59 A. D. In the immediate sequence of this matricide there happened a remarkable eclipse of the sun. Following so closely in the wake of Agrippina's murder, it was remarked in Rome as one of the outstanding prodigies and portents of the year. It was noted by Tacitus as one of the ominous events of the consulship of Caius Vipstanius and Lucius Fonteius. By Pliny, the naturalist, it was regarded (independently of the affairs of men) as a wonderful celestial phenomenon, which deserved to be studied and recorded. Ac-

cordingly, he reported his observation of this eclipse for the benefit of posterity. He says (*N. H.*, B. II, C. 72): "The eclipse of the sun which happened only a few years ago, *when Vipsanius and Fonteius were consuls*, occurred on the day preceding the kalends of May [April thirtieth], between the seventh and eighth hour of the day in Campania, but the tenth and eleventh hour in Armenia; and so the curve of the globe both reveals and conceals different objects from the inhabitants of its different parts." Now there was precisely such an eclipse of the sun in 59 A. D., but not in 58 or 60. It follows, therefore, that, since, there was just such a solar eclipse in 59 A. D., as described, and 59 A. D. is identified, by common consent, with the consulate of Vipstanus and Fonteius, the location of this consulate in J. P. 4772 or 59 A. D. must be correct.

The remaining consulships of Nero's reign, succeeding the *fourth* administration by Nero himself, are found in full tale in the annals of Tacitus and in the consular list of Idatius and (by implication) in the *Chronicon Paschale*. The consular term omitted by Cassiodorus and Victorius, that of Rufus and Regulus, is proven indispensably necessary for a complete count by the Capitoline registration, which, in the work of Frontinus, not only gives the numerical order, but the index and title of this consulship—"Verginius Rufus and Memmius Regulus, A. U. C. DCCCXIV [814]." It is also required by the periodic quadration of the Olympiads, or the formation of the Olympiads in quadrienial periods. This is evident from the treatment the Olympic games received at the hands of Nero.

The year in which Nero, the would-be poet laureate and grand opera singer of the Roman world, made his momentous "resolve to defer his expedition into Greece," was the consulship of Caius Laecanius Bassus and Marcus Licinius Crassus Frugi (A. U. C. 815 Varro 817] or J. P. 4777 = 64 A. D.)? It followed, numerically and canonically, the consulate of Rufus and Regulus which, as the 814th year of Rome according to Frontinus, properly filled the chasm created by Cassiodorus and Victorius between the consular terms of Celsus and Gallus (in 813 A. U. C. [cap.]) or 62 A. D. and that of Crassus and Bassus in A. U. C. 815 or 64 A. D. In terms of the Olympic scale the time when Nero renounced his thespian enterprise temporarily was the second year of the hypothetical or Eusebian series of Olympic contests, or the fourth year of the historical and commonly accepted series. In either phrase, the chronological conditions are the same as those in the fourth consulship of Nero, (in 60-61 A. D.) when the 209th Olympiad (defacto) was about to end. If, now, there had been, in this four-year period of the 210th Olympiad, only three Roman consulates to correspond, there would henceforth have been "a

great gulf fixed" in the narrow confines of this Olympiad which it would have been hard to account for and still harder to amend. The consulship, however, of Rufus and Regulus is historical, and therefore entirely in its place.

Nero's deferment of the Olympic games, occurring in A. U. C. 815 or 64 A. D., could not by any possibility refer to athletic games that were past or alleged to have been observed in A. U. C. 814 or 63 A. D., but must, in the nature of the case, refer to games still to be played or proposed for the future, consequently, to the contests intended to be observed in A. U. C. 816 or 65 A. D. This would be a regular stadium year, as required by the order of the series, whether we reckon from a certified date ahead, say, from Herod's Olympic exhibition in A. U. C. 744 or 8 B. C., or from the rear, say, from Censorinus' second year of Olymp. 254, in 238 A. D. It appears, then, either that Tacitus appealed, in this instance, to the Capitoline count of Roman years, and for once dated this deferred exhibition A. U. C. 816, or his patent date by the Varronian computation is an error. Accordingly, the deferred games were not put off for a period of *four* years (from A. U. C. 816 to 820), but, as Eusebius asserts: "This Olympiad [CCXI] was not celebrated, Nero having postponed it. But it was celebrated *two years after*." If, then, it is certain that the 211th Olympiad was not observed at the regular time of its quadriennial revolution when Nerva Silianus and Atticus Vestinus were consuls in 65 A. D., but was solemnized at the appointed time of its postponement when Fonteius Capito and Julius Rufus were consuls, in 67 A. D., and if, in addition, it may be supposed (as it is implied), that the series of succeeding Olympiads resumed the regular order of quadriennial rotation, it becomes a matter of self-evident conclusion that the Olympiads went on in their order as if no interruption or suspension had occurred—the 212th in 69 A. D., the 213th in 73 A. D., the 214th in 77 A. D., and so forth, until the 254th Olympiad, with its first year in 237, and its second in 238 A. D., immortalized the symposium of Censorinus, and by its imposing crystalization of chronological data precluded the possibility of shifting the historical series of the Olympiads either up a year or two years down. When it is recalled that the second year of the 209th Olympiad, only eight years before the deferred celebration of the 211th by Nero, was emphatically punctuated by an eclipse of the sun which was definitely and directly connected with the consulship of Vipstanius and Fonteius in 59 A. D., itself inextricably tied up with Nero's third and fourth consulships, and accounted the fifth year of Nero's reign in Ptolemy's *Canon*; and when it is further considered that the interval of 180 years between this strongly intrenched, impregnable date and the tremendous ulti-

matum of chronological data by Censorinus was literally a regimentation of small eras and epochs, the rank and file of which must never exceed and never fall short of four Olympiad years, it will be rather a matter of surprise and wonder that anyone should ever have thought of increasing or reducing this multiple of four by so much as an entire year.

In concluding our review of the chronological data available for the location and confirmation of the reign of Nero, we shall endeavor, not only to outline the administration of the empire by Nero and Galba, but to delineate the action taken by him against the holy people. Since the destruction of Jerusalem by Titus is the ulterior terminus of the period which, for the purpose of establishing the life-time of Jesus and stabilizing the Christian festival of Easter, we intend to encompass, reduce to days and weeks, and finally to reconstruct into its Syro-Macedonian calendaric form as it obtained in that period, it is obviously incumbent on us to produce arguments of such character and quality that they will survive any objection or exception that may be brought against them.

The Jewish war period, which we are about to define simultaneously with the closing years of Nero's reign, began, as Josephus informs us (*Antiq. B. XX. C. IX. §1; Wars, B. II. C. XV. §4 and C. XX. §9*), "in the *twelfth year* of the reign of Nero, and the *seventeenth* of the reign of Agrippa, in the month of Artemisius [Iyar or April-May]," and ended, with the taking of Jerusalem (*B. VI. C. X. §1*), "in the *second year* of the reign of Vespasian" (*Wars B. VI. C. IV. §8*), "on the eighth day of the month Gorpiaeus" [Elul or August], corresponding, as a coin struck in commemoration of "Judaea capta" tells us, to the *twenty-first year* of Agrippa. If, then, the rebellion broke out on the first of May, and ended, after an armed interstice of four and a half years, on September fourth, there can have been no less than four regular consulships, nor more than four annual terms of consular dignity, within this compass of fifty-two months. However the divers and conflicting dates for the overthrow of the Holy City may have been brought about, they cannot be manipulated by the interpolation of an extraordinary consulship for the earlier, nor by the evacuation of a supposedly supernumerary consulship for the later mode of reckoning. The consulships, therefore, for the duration of the Jewish war were these:

A.U.C.(Varro) Ol.(Eus.)		Consuls.	Nab. J.P. or A.D.		
817—819	211 ⁴	C. Lucius Telesinus; C. Suetonius Paulinus	813 ¹²	4779	66
818—820	212 ¹	L. Fonteius Capito; C. Julius Rufus	814 ¹³	4780	67
819—821	212 ²	C. Silius Italicus; M. Gal. Trachalus Turp.	815 ¹⁴	4781	68
820—822	212 ³	Ser. Sulpicius Galba II; T. Vinus Rufinus	816 ¹	4782	69
821—823	212 ⁴	T. Flavius Vespasianus II; Titus Caesar I.	817 ²	4783	70

It is true, "Cassiodorus and Victorius have here [in 68 or 69 A. D.] inserted *two* consulships," as Dr. Jarvis (in *Chron. Intr.*, p. 301) observed, "where the other lists have but one." But Dr. Jarvis does not here avail himself of the supernumerary consulship of Silvanus and Otho to boost up his catalogue of consulships to a higher level, seeing that this is too obviously a substitution for the regular team, from the death of Galba and Vinius (on January fifteenth) until the kalends of March. Outside of this one blunder, there is nothing to suggest either an addition or an omission of a consulate. All others are so well authenticated that they need only to be mentioned in serial order to be acknowledged as real and true to life.

According to Josephus, then, the Jewish war commenced in the spring of J. P. 4779 or 66 A. D.; for that was beyond cavil the twelfth year of Neronian rule, beginning his regnal years from the death of Claudius on October thirteenth. The condition of affairs in both the Hebrew and the Roman state was such that both the Jewish and the Gentile historian express the same sentiments regarding their own people. Josephus supposes (*Wars* B. II. C. XIX. §6) that it was "owing to the aversion God had already at the city and the sanctuary, that he [Cestius] was hindered from putting an end to the war that very day," while Tacitus (*Ann.* B. XVI. S. XVI) admits it to be the truth, that "the wrath of Heaven was bent against the Roman state." Both empire and province were unquestionably corrupt, and both received as well as deserved condign chastisement. The first, however, to be chastised was not the Jewish, but the Roman belligerent. Cestius, the commander of Roman forces in and around Jerusalem, mistaking the friendly stampede of the people out of the city for a hostile skirmish or encircling manœuver, embarked on a precipitate retreat before he had fairly been invited to fall back. Once on the run, he was soon in a regular rout. The discomfiture thus sustained by the Romans was naturally regarded by the Jews as a great victory. It was recorded by Josephus (*Wars* B. II. C. XIX. §9) thus: "This defeat happened on the eighth day of the month Dios [Marchesvan or Bul], in the twelfth year of the reign of Nero."

Aside from the careless inaccuracy of the Jewish historian who fails to remember that Nero's regnal years commenced on October thirteenth (not on January first), the news of this reverse to the Roman arms on November sixteenth, 66 A. D., reached Nero near the close of the consulate of Suetonius Paullinus and Lucius Telesinus [J. P. 4779 or 66 A. D.]. He was then in Achaia, as Josephus says (*Wars* B. II. C. XX. §1), or Greece, as Tacitus has it (*Ann.* B. XVI. S. VI). There in the train of not less than

five thousand travelling companions, were also Vespasian and his sons. Him Nero selected as the suitable conductor of the war against the Jews (see Jos. *Wars*, B. III. C. I. §2, and Tacitus, *Ann.*, B. XVI. S. VII). This was so early in the consulship of Fonteius Capito and Julius Rufus (A. U. C. 818 [Varro 820] or 67 A. D.) that Josephus remarks: "So Vespasian sent his son Titus from Achaia, where he had been with Nero, to Alexandria, to bring back with him from thence the fifth and tenth legions, while he himself, when he had passed over the Hellespont, came by land into Syria. . . . But as to Titus, he sailed over from Achaia to Alexandria, and that sooner than *the winter season* did usually permit." (Jos., *Wars* B. III. C. I. §3 and C. IV. §2) The opening of the sea was usually announced for the thirteenth of March, though spring time was said to begin on February ninth (see *Praenestine Calendar*). So Vespasian tarried but a very short time at Ptolemais in winter-quarters (Fonteius Capito and Rufus being consuls), and then, at the earliest opportune time, opened up his campaign in Galilee. Being very desirous of demolishing Jotapata, the strongest of Jewish fortifications, before proceeding against Judea proper, he laid siege to this fortress (defended by Josephus), and, after an investment and bombardment of forty or forty-seven days, captured both Josephus and the stronghold without the loss of a single life (excepting one centurion who was killed by treachery). "And thus was Jotapata taken, in the *thirteenth year* of the reign of Nero, on the first day of the month Panemus." (Tamuz first or July second, 67 A. D.)

How, or to what length, Nero reacted to the irritation offered him in the irksome beleagerment of Jotapata, we are not explicitly told, but we believe that, if ever there was a psychological moment when that tyrant would be in the mood to order the martyrdom of Sts. Peter and Paul, it was on June twenty-ninth of this year, the 4780th of the Julian Period or the sixty-seventh of the Christian Era, when the affront to Roman majesty and Roman strategy was at its worst. The Olympic games were then just about to begin, and the flood-tide of flattery and fawning adulation had already set in. Even before his advent in Achaia, a deputation from the cities of Greece had arrived in Rome, with orders to present to the emperor the victor's crown for minstrelsy and song. In the course of the contests, "he was proclaimed victor in all trials of skill, and gained no less than eighteen hundred different crowns." (Tac. *Ann.* XVI. S. VII) In the pride and elation of his heart, he resolved to make a progress through the conquered country. When he arrived at Corinth, he was surprised to see by what a narrow isthmus the two seas were separated. "He resolved, therefore," says the annalist (Tac. *Ann.* XVI. s. X), "to begin the work [of forming a navigable canal to

combine the two seas] without delay. With a golden pickaxe, he himself struck the first stroke into the ground and carried away the first basket of sand on his shoulder. He then ordered laborers and workmen on the project to be made of the inmates of the jails and prisons in every part of the empire, and the armies in Syria and Palestine had it in command to send to Corinth all the prisoners taken in battle." (Tac., *Ann.* B. XVI. C. X) And the Jewish historian reports (*Wars*, B. III. C. IX. §10): "Out of the young men he [i.e. Vespasian] chose six thousand of the strongest, and sent them to Nero, to dig through the isthmus." What more pathetic comment can be made on the fact that both historians are speaking of the same transactions?

The war being now virtually ended, since Josephus was successfully eliminated from the controversy (see *Wars*, B. III, C. VII. §3 and C. VIII. §1), we might complacently pass on to the consideration of other things if it were not for the fact that the war was still continued. Scarcely had Vespasian removed his men from Caesarea by the seaside to Caesarea Philippi (in the mountains) for a refreshing rest of twenty days, when he moved against Tiberias, Taricheae, and Gischala, while king Agrippa, a vassal of the Romans, sent his men to besiege Gamala, "for seven months together," that is to say, until the end of the seventh month. Having captured Tiberias and Taricheae, Vespasian, on the eighth of Gorpiaeus [Elul, eighth or September sixth], ordered 1200 old men to be slain as useless, six thousand strong young men to be sent to Corinth as canal-diggers, and 30,400 men, women, and children to be sold into slavery for what profit they might bring. When, after a siege of four weeks, from the twenty-fourth of Gorpiaeus [Elul twenty-fourth or September eleventh] to the twenty-third of Hyperberetaeus [Tisri twenty-third or October ninth], Gamala surrendered to Agrippa's auxiliaries, "the Romans, indeed, slew but four thousand, whereas the number of those that had thrown themselves down was found to be five thousand: otherwise they spared not so much as the infants of whom many were flung down by them from the citadel." (*Wars*, B. II. C. I, §10) Thus, while Nero luxuriated in Greece, and celebrated his entrance upon the fourteenth year of his reign (October thirteenth), Vespasian swept all Galilee like a great storm of wind, dispossessing the inhabitants of their home and taking fearful vengeance on them for their insurrection. Before the year was out, when Fonteius Capito and Rufus were consuls (J. P. 4780 or 67 A. D.), "Titus went from Gischala to Caesarea, and Vespasian from Caesarea to Jamnia and Azotus, and took them both." Then, biding his time, he stayed awhile, while the Jews went on destroying each other in senseless seditions and internecine quarrels. With this, the winter season of 67-68 A. D.

came on and went, leaving Vespasian strong and vigorous, but his opponents weak and exhausted.

The winter of Nero's fourteenth regnal year ushered in the consulate of Galerius Trachalus and Silius Italicus (A. U. C. 819 [Varro 821] or 68 A. D.). It must have been still in the winter months or the closed shipping season that Nero returned from Greece to Naples, since his return voyage is said to have been tempestuous. In that case he anticipated the opening of the sea on March thirteenth, but not more so than Vespasian did the breaking up of winter quarters. This able general "did indeed," as Josephus puts it (*Wars*, B. IV. C. VII. §3), "already pity the calamities these men [the Jews] were in, and arose, in appearance, as though he was going to besiege Jerusalem——. However, he was obliged at first to overthrow what remained elsewhere, and to leave nothing out of Jerusalem behind him that might interrupt him in that siege. Accordingly he marched against Gadara, the metropolis of Perea, which was a place of strength, and entered that city on the fourth day of the month Dystus." (Adar fourth or February twenty-sixth) Committing the minor task of rounding up the neighboring smaller cities and villages to Placidus, a subordinate officer, Vespasian himself returned to Caesarea, his headquarters, with the rest of his army.

At this important juncture, near the close of February or about the Kalends of March, A. U. C. 819 [Varro 821] or J. P. 4781=68 A. D., when Silius Italicus and Gal. Trachalus had already administered their consulate for about two months, an account of the commotions in Gaul excited by Vindex first reached Vespasian, who immediately read the signs of the times aright. Foreseeing even then, as Josephus says (*Wars*, IV. VIII. §1), "the civil wars which were coming upon them," and thinking "if he could first reduce the eastern parts of the empire to peace, he should make the fears for Italy the lighter," he at once, even before winter was quite over, possessed himself of the villages and smaller cities round about, strengthening some, restoring others, so that, at the beginning of spring, he could lead his army against the larger cities and strongholds. He successively occupied Antipatris, Thamnas, Lydda, Jamnia, Emmaus, and Beth Cetephon, in Judea proper, together with Betaris and Caphartobas, two villages in the central part of Idumea. Then, returning to Emmaus, he came down through the country of Samaria, to Corea where he pitched his camp on the second day of the month Daesius [Sivan second or May twenty-third, 68 A. D.]; and on the day following he came to Jericho." This occupation of Jericho was about two or three weeks before the death of Nero, who, at that time, was feasting and carousing at Naples. Vespasian, in the mean time, "fortified all the places thus captured round about Jerusalem, erected citadels at Jericho and Adida, placed garrisons

in them both, and only then returned to Caesarea, with a view to marching thence with all his army to Jerusalem. It was here, therefore, upon his returning to Caesarea after a brisk spring campaign, that he was informed that "Nero was dead, after he had reigned *thirteen years and eight days.*"

Now it is true that, at this time, Nero had indeed reigned thirteen years, but not merely eight days over. He had completed his thirteen years of government on October twelfth, 67 A. D., and if he committed suicide about the fifteenth of June, 68 A. D., he exceeded his thirteenth year by eight months instead of only eight days (exactly the figures given by Dion Cassius). But eight months *after* October twelfth indicates the middle of June, and seven months *before* the death of Galba [January fifteenth, 69 A. D.], according to Tacitus (*Hist.* I. C. 37), intimates the same approximate time. The day of Nero's death may be computed more exactly from the interval between the suicide of Nero and the accession of Vespasian.

Dion Cassius says that "from the death of Nero to the reign of Vespasian was one year and twenty-two days." Suetonius says that allegiance was sworn to Vespasian on the first of July, and that this day was afterwards officially observed as the inauguration day of his reign. But one year and twenty-two days from the first of July, 69 A. D., carries us back to the ninth of June, 68 A. D., as the authentic date of Nero's self-destruction. The length of his reign, then, computed up to this day from and including the thirteenth of October; 54 A. D., will be exactly the amount given by Cassiodorus, 13y. 7m. 28d., and, if read with a slight correcting touch, by Theophilus of Antioch, 13y. 6m. [=7m.] 28d., and by St. Clement of Alexandria, 13y. 8m. [=7m.] 28d. Thus the duration and end of Nero's reign, though not specifically dated by Suetonius, and not sharply delineated by Ptolemy's *Canon*, Eutropius, and Victor, may nevertheless be closely arrived at by channels of great chronological certainty. Not so the amount of his age at the time of his death.

According to Suetonius and Eutropius, Nero departed this life in the thirty-second year of his age, but according to Tacitus, he never reached that age. For if we add the duration of his reign to the sum of his age at the time when he began to reign, that is to say, 13y. 7m. 28d. + 16y. 9m. 29d., we shall have his total age at the time of his death to amount to only 30y. 5m. 27d. This amount is three months and three days less than the summation of Dion Cassius, who is usually so accurate and precise in his computations.

While the death of Nero put a permanent stop to the ascendancy of the Julian family of Caesars, it brought only a temporary halt to the Jewish war. That luckless conflict was not terminated

until two entire twelvemonths afterward, though for the present it rested on its arms with the natural inactivity due to the fluctuations of world affairs. That the war, though suspended, did not come to an end for two years and two months after this, is easily perceived from the fact already mentioned that it was a year and twenty-two days from the death of Nero to Vespasian's accession, and from the further fact that it is a year, month, and week from this elevation of Vespasian to the destruction of Jerusalem, which happened in the second year of the new emperor's reign. Furthermore it is plain that a whole year intervened between the Pentecostal season under Nero (Daesius or Sivan second = May twenty-third, 68 A. D.) and the Pentecost (Daesius or Sivan fifth = May fifteenth, 69 A. D.) under Vitellius, shortly after Vespasian had resumed military operations in Judea proper. (comp. Josephus *Wars*, B. IV. C. VIII. §1 and C. IX. §9) But, long as the suspension of hostilities was on the part of the Romans, the effusion of blood on the part of the Jews did not cease: they kept up the war between themselves. As for their principal antagonist, Vespasian, in the first place, "put off his expedition against Jerusalem," as Josephus says (*Wars* IV. C. IX. §2), "and stood waiting whither the empire would be transferred after the death of Nero. Moreover, when he heard that Galba was made emperor, he attempted nothing till he also [like Nero] should send him some directions about the war." It was winter-time, however, [68-69 A. D.] before Vespasian sent his son Titus to Galba, to salute him, and to receive his commands concerning the Jews; for, before Titus and king Agrippa could get to Rome, they heard, by the coasts of Achaia, that Galba had been slain, having reigned seven months and as many days.

That Vespasian should have permitted seven months or so to elapse before he sent Titus on his belated mission, goes to show how exceedingly doubtful Galba's position appeared to a great many men of his day. It is not without cause that his biographer says of him: "He governed the province [of Hispania Tarraconensis] during eight years, his administration being of an uncertain and capricious character." Could it be wondered at if this had been the reason why Ptolemy, the astronomer, ignored the government of Galba and added his year of empire to the reign of Nero? Chronologically, it matters not to whom the canonical year Nab. 815 is ascribed: the reckoning of time is just as firm and irreformable under the name of Nero as it is, or would be, under the shield of Galba, but historically it must be understood that, consistently with the principle of Ptolemy's Canon, this year should be accredited to Galba. For while the tyranny of Nero in no way approached the fourteenth milestone of Nabonassan years (as we may style their "final" or "last day"), which

this year terminated on August fifth, Galba's administration did, comprising the two months before it and the five months after it. No other arrangement does justice to the plain statements of the historians or to the testimony of Ptolemy's *Astronomical Canon*.

It may be objected by the disciples of the anachronistic school of chronology that the lunar obscuration of October twenty-ninth, 68 A. D., claimed by Dr. Jarvis and Prof. Totten to have been the eclipse named in connection with the battle of Cremona, makes a displacement of Galba's reign, together with all the events of the year, an absolute necessity, placing the bulk of Galba's reign in 67 and Vespasian's accession in 68 A. D. Now it must be admitted that there is nothing like an eclipse to test the accuracy of any reckoning of time: so for that very reason we shall inquire minutely into the circumstances of this very important obscuration of history: for, misinterpreted, it certainly obscures, but interpreted correctly, it illumines history most wonderfully.

It may be stated from the start that the battle of Cremona, of course, was the deciding issue for the control of the empire between Vitellius and Vespasian, the former contending for the upper hand, from the beginning of the year, first, against Galba, from January first to January fifteenth; then against Otho, from January fifteenth to April seventeenth; and then, from his eighth month on to his twelfth, against Vespasian, who, on and after the victorious issue of Cremona, assumed undisputed possession of the empire. But when was the battle of Cremona fought? While the metachronistic school of chronology, which places the destruction of Jerusalem in 71 A. D. and Vespasian's accession to power in 70 A. D., does not even pretend to avail itself of a lunar eclipse's testimony in behalf of its contention (since there was none to be found in the year 70 A. D.), the fathers and founders of the anachronistic school lay great stress on the obscuration of October twenty-ninth, 68 A. D. "The decisive battle of Cremona," says Dr. Jarvis (*Chron. Intro.*, p. 317) and, after him Prof. Totten (*Our Race*, Ser. IV. No. 11, p. 266), "must have been fought on the twenty-ninth of October. It began about nine o'clock in the evening (*tertia ferme noctis hora*), and continued the whole night, 'various, doubtful, atrocious.' The sun rose upon them as they were fighting." [See Tac. *Hist.* III, 22-24].

"Dion, who has given [*H. R. B.* lxx. C. 11] a most eloquent description of this battle, mentions a circumstance, omitted by Tacitus, which enables us to fix its date. 'While this commotion existed in the army of Vitellius, it was greatly increased by an eclipse of the moon, which to their terrified minds seemed not only overshadowed, but to be black and bloody, and to emit

other fearful colors. The soldiers, however, did not on this account desist from their purpose; but when Primus [the general of Vespasian's army] sent messengers, they sent others, exhorting him to submit to Vitellius. This brought on a severe battle, though the soldiers of Vitellius were without a general; for Alienus [Caecina] was in chains in Cremona."

"At sunrise a panic seized the soldiers of Vitellius, and they fled to Cremona [c. 14]. By the tables of Pingre, it appears that a total eclipse of the moon took place A. D. 68, October twenty-nine, and 6h. 30m. A. M. The moon was then in the western horizon, and the approaching light of the sun in the east, and the exhalations in the west, produced the variety of colours by which the soldiers were terrified."

This version of the events, as given by Dr. Jarvis, we admit is specious enough to produce an obfuscation of the mind equalled only by the obscuration of the Cremona moon. But however plausible this explanation may appear at first sight, a second review of Dion's words will expose the fallacy of the doctor's presentation of facts. If we understand the narrative of Dion Cassius at all, the trend of things at the eclipse-connoted battle of Cremona was this. First, there was a commotion in the army of Vitellius (the one that was defeated in this battle) Secondly, there was an increase in the commotion of the same army caused by an eclipse of the moon, which commotion, however, did not culminate in a panic or issue in a collapse of military morale. Third, there resulted, instead of a panic, a parley, or interchange of challenges, emanating forsooth from the soldiers supposed to be cowed by the moon's occultation. Fourth, there succeeded subsequently to all this, an exchange of blows and the assault and battery of a regular battle. Accordingly, if the battle, as Dion describes it, lasted all night or the greater part of the night, the eclipse of the moon cannot have occurred near sunrise, for then the entire encounter would have projected into or through the whole of the following day, but it must have been preceded by the eclipse in the forepart of the night, or, in other words, in the evening or early night-fall of the day which preceded the all-night engagement. Only in this way does the evolution of the battle seem natural and historical. But if the eclipse, to appear in place and to constitute a plausible exciting cause of the battle, must have occurred before even the incipient stages of the encounter were staged in dead earnest, then it simply cannot have been the rosy-dawned discoloration of October twenty-ninth, 68 A. D. And, furthermore, if there was any kind or kindred of armed conflict enacted in connection with the eclipse of October twenty-ninth, 68 A. D., it is certain that that clash of arms was not the decisive battle of Cremona.

According to the Latin historian (see Tacitus, *Hist. B. III. ss. XXII-XXV*), the engagement began about the third hour of the night, the Vitellian army making the first forward movement, without conduct or judgment, against that of Vespasian, which was properly drawn up in order of battle. In the gloom of night and darkness, the numerically stronger force of Vitellius gained the first advantage. "Vespasian's army was giving way, when Antonius [or Primus] brought the praetorian cohorts into the heat of action. They routed the enemy, and in turn forced the Vitellians to retreat. It was at this time, just when the latter had removed their battering engines from the muddy field to the paved highway, that, "night being far advanced, the moon rose [or emerged from its obscuration], and discovered the face of things with great advantage to Vespasian's army. The light shone on their backs, and the shadows of men and horses projected forward to such a length, that the Vitellians, deceived by appearances, aimed at the wrong mark. Their darts, by consequence, fell short of their aim. The moonbeams, in the meantime, played on the front of their lines, and gave their bodies in full view to the adverse army, who fought behind their shadows, as if concealed in obscurity."

Thus the battle had hitherto been fought with doubtful success, but if, as the author said before, it lasted throughout the night with great slaughter on both sides, and with alternate success, it must have continued for some time in the light of the moon, for Tacitus says (in the next section of his third book): "Antonius, at length, was happy that he could see, and be seen. He did everything to rouse the courage of his men; . . . A general shout resounded through the field; and in that moment the third legion, according to the custom observed in Syria, paid their adoration to the rising sun."

"This eastern form of worship," concludes Tacitus, [not the obscuration of the moon in any form of influence or after-effect], "either by chance, or by the contrivance of Antonius, gave rise to a sudden report that Mucianus [the other Vespasian general coming up with reinforcements] was arrived, and that the two confederate armies exchanged mutual salutations." The result was that Vespasian's soldiers, as if actually reinforced, charged with redoubled fury, while the Vitellian forces gave up the fight and fled from the field of battle.

So, according to neither account of Dion Cassius or Tacitus, did the eclipse of the moon so terrify the Vitellians that a panic seized them, nor did "the approaching light of the sun in the east, and the exhalations in the west, produce the variety of colours by which the soldiers were terrified."

On the other hand, if we concentrate on the middle of the

three years—68, 69, 70—, tentatively selected for the beginning of Vespasian's reign and the resumption of hostilities in Palestine, and look at the circumstances surrounding the eclipse of October eighteenth, 69 A. D., we shall not only be surprised at the naturalness with which it falls in with the course of human events, but be satisfied that this early night obscuration is, as agreed upon by the vast majority of chronologists, the victory-crowned eclipse of Cremona. It occurred some six or seven hours earlier than that of 68 A. D.; that is to say, about ten or eleven o'clock in the evening of October eighteenth, 69 A. D. Stealing upon the imagination of the impetuous soldiery of Vitellius, "about the third hour of night," it was a darkening of the moon which might indeed depress, but could not wholly daunt the spirits of such men as the soldiers of Vitellius. Far from desisting from their purpose (though without a military leader), they persisted in provoking their antagonists to a fray. They fought like men, and they fought like beasts, but they were out-generalled, being "without a general," who was bound in chains at Cremona. The light of the moon, after it had been released from the captivity of darkness (about midnight), was indeed turned against them, but they still fought bravely, until, at sunrise, not a relapse into terror at the moon's occultation, but a blundering misinterpretation of their enemies' salute to the sun, instilled into their minds the quite natural fear of being outnumbered in the fight. They fled to escape being surrounded and sold into slavery as prisoners of war.

Assuming, then, with the majority of leading chronologists that the ten years' imperial rule of Vespasian began properly on the first of July preceding the lunar eclipse of October eighteenth, 69 A. D., even as the *Astronomical Canon* ascribes the beginning of Vespasian's first year to Nab. 816, not because his first year of empire included the first of Thoth 816 N. E. on August sixth, 68 A. D., within its scope, but because the Egyptian year Nab. 816 included the last of the epagomenae (August fifth) in the first regnal year of Vespasian, which officially began on July first, 69 A. D., we shall now return to his renewed prosecution of the Jewish war.

After what has been said about the conclusion of the civil war in the heart of the Roman empire, the deduction follows but naturally that the date of the Jewish war's termination, involving the burning of the Temple and the general destruction of Jerusalem, has been definitely settled with it. For although, on supposedly high authority, this catastrophe, ascribed by the historian to the second year of Vespasian, has been variously ascribed to 68 A. D., by Myers, Lyon, Lindo, and modern Jewish authors in general; to 69 A. D. by Dr. Jarvis, Mr. Page, Prof. Totten, and

others; to 70 A. D. by Blair, Lloyd, Ussher, Anderson, Browne, Shimeal, Elliot, and so forth; and to 71 A.D. by Sheldon, Dimbleby, Seyffarth, and others, nevertheless it is already plain that only 70 A. D. can possibly be right. Awaiting developments in his own contention for the imperial dignity, Vespasian repaired to the city offering the best communication with Rome—Alexandria. While here, in the metropolis of Egypt, he was not only proclaimed emperor, but, on his return to Palestine, was declared consul for the ensuing year, as Titus also was made caesar and consul in conjunction with his father. As Titus was thus appointed and empowered to conduct the wars of the forthcoming consular term, it follows as a matter of course that he conducted the Jewish campaign in that term of office known as the consulship of Vespasian II and Titus Caesar I, J. P. 4783 or 70 A. D. It might be objected, as it is in a foot-note of Dr. Thomson's translation of Suetonius, that Jerusalem was taken, sacked, and burnt, by Titus, after a two years' siege, and therefore after an intermission of a year beside the term of his consulship. But this over-estimation of the siege is easily disproved by another statement of the same foot-note with regard to the age of Titus at the time of the City's fall. It is there asserted that Jerusalem was razed "when the emperor was sixty years old, and Titus himself, as he informs us, *thirty*." If he was born, as Suetonius tells us, "upon the third before the Kalends of January, in the year remarkable for the death of Caius [Caligula]," consequently on December thirtieth, 40 A. D., when Caius Caligula III was consul without a colleague, and died "upon the Ides of September [the thirteenth of September, A. D. 81], in the one-and-fortieth year of his age," when Silva Nonius and Asinius Pollio Varucosus were consuls, then, whether we reckon thirty years forward or eleven years backward, the thirtieth year of his life was almost perfectly identical with the Julian year 4783 or 70 A. D., as the year in which Jerusalem was razed and burnt by Titus. There cannot, therefore, be any doubt as to when the Holy City fell and the Jewish war came to its mournful end.

Yet, since we have now arrived at the reign of that emperor from whose administration it is proposed by the later-occurrence school of chronology to drop or suppress an entire consular twelvemonth, it is more than ever imperative that we should get a clear conception of what is involved in this innovation, and what would have to be done to encompass such a change as proposed. Let us set the matter before us.

Suetonius relates in his *Life of Vespasian* (S. 25) that he once saw in a dream a balance in the middle of the porch of the Palatine house exactly poised; in one scale of which stood Claudius and Nero, in the other, Vespasian and his sons, Titus and Domi-

tian; that is to say, he saw, in a dream, how his own dynasty exactly counterbalanced the imperial years of the two last members of the Julian dynasty, Claudius and Nero. Since each dynasty lasted an even twenty-eight years, it was Claudius fourteen years *versus* Vespasian ten, Titus three, and Domitian fifteen years. Now, was this only a beautiful dream or was the equation true to facts and figures?

According to the dictate of the *Astronomical Canon*, as well as the dream narrated by his biographer, the equation was an actual occurrence of life, conceding that Galba's abbreviated reign may be legitimately included in Nero's count. The question then is, should the scales of the respective dynastic years be balanced like this: $14 + 14 = 10 + 3 + 15$, or like this: $14 + 13 = 9 + 3 + 15$? Dr. Gustav Seyffarth, a leading exponent of the metachronistic view (see *Summary of Recent Discoveries*), assails the commonly accepted ratio in the following fashion: "No consul being designated to his consulship sooner than six months previously,[?] and the Inscriptions demonstrating that Vespasian, during his eighth consulship was designated to his ninth consulship, it is obvious that both consulates of Vespasian followed immediately the one after the other [?]; as is proved by the other consulships of Vespasian. Thus then Petavius inserted erroneously those consuls between the eighth and ninth consulship of Vespasian, when, in fact, they were but *Coss. suffecti*, or *extraordinarii*, intercalating them one whole year. This is, besides, proved by all the following and preceding eclipses and by the coins of Vespasian, and the years of his reign. For Eutropius gives him but nine years minus seven days, and all others reckoning from Nero's death, but ten years. There is not a coin nor inscription in existence, concerning the supposed tenth year of Vespasian, as during the year, which Petavius adds, there certainly must have been some coins or inscriptions executed."

In order to set this specious argument in a light as favorable to the postulate of Dr. Seyffarth as possible, let us write out the complete list of consulships as they occurred in actual life.

A. U.C. (Varro)	Ol. (Eus.)	Consuls.	Nab.	J.P. or A.D.
820—822	212 ³	Serv. Sulpicius Galba II; T. Vinius Rufinus	816 ¹	4782 69
821—823	212 ⁴	T. Flavius Vespasianus II; Titus Caesar I.	817 ²	4783 70
822—824	213 ¹	Vespasianus Aug. III; M. Cocceius Nerva	818 ³	4784 71
823—825	213 ²	Vespasianus Aug. IV; Titus Caesar II.	819 ⁴	4785 72
824—826	213 ³	Domitianus Caesar II; M. Val. Messalinus	820 ⁵	4786 73
825—827	213 ⁴	Vespasianus Aug. V; Titus Caesar III.	821 ⁶	4787 74
826—828	214 ¹	Vespasianus Aug. VI; Titus Caesar IV.	822 ⁷	4788 75
827—829	214 ²	Vespasianus Aug. VII; Titus Caesar V.	823 ⁸	4789 76
828—830	214 ³	Vespasianus Aug. VIII; Titus Caesar VI.	824 ⁹	4790 77
829—831	214 ⁴	C. Cejonius Commodus; D. Novius Priscus	825 ¹⁰	4791 78
830—832	215 ¹	Vespasianus Aug. IX; Titus Caesar VII.	826 ¹	4792 79

If we were obliged to regard the above scheme as the model of a priceless mosaic rendered beautiful by the regularity and symmetry, and harmonious proportions of its lines and flourishes, we should say: this is a faulty specimen. There are, at least, two flaws in it. To be artistically perfect, it should be consistently Vespasianic. It should read Vespasian and Titus at every turn, and Flavian family should be writ all over it. There should not be a break or scratch anywhere on its highly polished surface. It should be Vespasian first, last and all the time. But is history thus made to order, according to pattern, or with a view to uniformity and design?

Historical facts, like peaks of a mountain range, are tossed and tumbled about in chaotic confusion more frequently than serried in harmony and order, and it is our province, not to adjust facts as we wish them to be, but as they were indeed. Vespasian's elevation to imperial power, to begin with, occurred in a consulship the parties to which high office were foreign to the Flavian name, the consulship of Galba II and Vinius Rufinus. This was beyond all cavil the year of Rome 822 (according to Varro) or 69 A. D. The second year of his reign was the first to be graced with the name of Vespasian and Titus, while he was still in the east. Upon his return to Rome, as acknowledged emperor, eight consulships were added to his former one. Not since the days of Caesar Augustus had any man enjoyed such a series of consulships in succession, nor had any man received so many honors in consular endowments as did his son Domitian. Yet the argument of Dr. Seyffarth, that the sublime array of eight consulships in succession should be considered an unbroken series, is vitiated from the start, not merely by the association of a non-Flavian name with that of Vespasian, during his third consulship [viz. Cocceius Nerva in 71 A. D.], but by the insertion of another exotic name in connection with that of his son Domitian in his second consulate, that of Valerius Messalinus in 73 A. D. But, however that may be, it is claimed that the eighth and ninth consulships of Vespasian certainly followed the one after the other [respectively in 78 and 79 A. D.], the consulship of Commodus and Priscus being a mistaken interpolation of Petavius, which had no justification or foundation in fact.

However truly this ostensibly mistaken consulate may appear as an eyesore to the aesthetic architect of a cherished chronological scheme, this consular term of Commodus and Priscus demands a position of undisputed and equal right to be there where it is on a par with its fellows, and there on a plane of hallowed dignity and honor for all the very reasons alleged to be against it. To make them all the more clear and luminous, we shall

range them in their true chronological order by lining them up in connection with the consulships of Vespasian.

1. The eclipse of the moon which preceded his designation to the consulship for his second term.

2. The solar and lunar obscurations which occurred in the year of his triumph, Vespasian IV and Titus II, coss.

3. The planetary configurations preceding the birth of Adrian when Vespasian was consul, V, VI, and VII.

4. The inscriptions commemorating Vespasian's VIIIth consulship.

5. The consignment to consular office in advance.

6. The non-existing coins of the tenth year of Vespasian.

In view of the fact that an unjustified move *downward* is as much of a mistake as a move upward, let it be repeated that the initial regnal year of Vespasian began neither in 68 A. D. nor in 70 A. D., but in 69 A. D. The eclipse of the moon on October twenty-ninth, 68 A. D., was anything or everything else but the eclipse brought historically into connection with the battle of Cremona, and, there being no lunar eclipse on record for the twelve months of 70 A. D., there was nothing in existence in that year on which an historian could hang even the shadow of an overshadowed moon. There remains only the one year which has nearly always, and well-nigh universally, been considered the year of Vespasian's accession to empire, A. D. 69. This emplacement being settled by an appeal to this historic eclipse, we may immediately apply its authoritative testimony for the location of the second consular term of Titus in conjunction with the third or fourth term of Vespasian. Pliny the naturalist speaks of an eclipse of the sun and another of the moon, within fifteen days of each other, during the reign of the two Vespasians, father and son, while they were both consuls, the former for the third [or rather the fourth] time, but the latter for the second time. The champions of anachronistic chronology, Dr. Jarvis (*Chron. Intr.*, p. 300), Mr. Page (*New Light*, p. 95), Prof. Totten (*Our Race*, No. 16, p. 340), Strong (*Har. and Ex.*), and so forth, base their claim for the right to emplace this consulate in 71 A. D., on the lunar eclipse of March fourth and the solar eclipse of March twentieth in the year 71 A. D., while the leaders of the opposite aberration ignore the question altogether. In order, therefore, to get a correct perspective of the situation, let us jot down all the eclipses of the years 68 to 73 A. D.:

A.D. 68	5/5	5/19(20)	10/29	11/13	
A.D. 69	4/10	4/24	10/4	10/18	
A.D. 70	3/30		9/23		
A.D. 71	3/4	3/20	8/29	9/12	
A.D. 72	2/7 . . 2/22	3/8	8/2	8/17	9/1
A.D. 73	1/26	2/11	7/23	8/6	

Now the prime mandate to be met in this case is the condition postulated by Pliny himself, viz. that the solar and lunar eclipse referred to by him did not only occur in the consulship of Vespasian and Titus (Titus II), but did happen within the space of fifteen days. It will be seen at once that both reactionary schools of chronology ignore this condition. In 71 A. D., the span of time between March fourth and March twentieth [$20-4=$] is sixteen (16!), not fifteen days or less; in 73 A. D., the other alternative, the case is the same: the distance between the two dates, January twenty-sixth and February eleventh, is *sixteen days*, not fifteen or less [$31-26=5+11=16!$] The only year in which the interval between the two eclipses is fifteen days or less is 72 A. D., the commonly accepted, because conditionally accredited and authenticated date for the fourth consulship of Vespasian and the second of his son Titus. From the twenty-second of February to the eighth of March [$28-22=6+8=14!$] as well as from the seventh of February to the twenty-second (15!), and from the second of August to the seventeenth of August as well as from the seventeenth of August to the first of September the number of days is fifteen and even less! So it appears that the appeals to the planets does not support or corroborate the position of either dissident school of chronology, but rather dissipates and destroys every semblance of truth in the premises and in the conclusion.

Another appeal to the planetary configurations in the antecedents of the birth of the later emperor, Adrian or Hadrian, to be found in the fifth, sixth, and seventh consulships of Vespasian, does likewise not support or substantiate the contention of Dr. Seyffarth that these three, and all of Vespasian's consulships, must be lowered an entire twelve month to A. D. 75, 76, and 77 respectively, on the contrary, it subverts, overturns, and upsets any claim to correct deduction or demonstration. If the planetary configuration of the Corinthian Puteal refers to the winter-solstice on December twenty-second of the year preceding the birth-year of Adrian (see Seyffarth, *Bericht* p. 244), and the planetary configuration of the temple of Daphne pertains to the vernal equinox on the twenty-third of March preceding his birth on the twenty-fourth of January of the year *when Vespasian was consul for the seventh time and Titus for the fifth* (see Seyffarth, *Bericht* p. 217), then this seventh consulship of Vespasian must have been coincident with 76 A. D., his sixth coincident with 75 A. D., and his fifth with 74 A. D. For if Adrian was sixty-two years five months and 17 days old (according to the emended text of Spartian [Spartian has lxxii instead of lxii]) when he died on July tenth, 138 A. D. (a date not contested by Dr. Seyffarth), then the birth of Adrian or Hadrian on January twenty-fourth and, with it, the

seventh consulship of Vespasian, must be assigned to 76 A. D., not to 77 or 75. The stars are therefore not very favorable to the aberrant theories of Dr. Seyffarth or Dr. Jarvis.

The inscriptions commemorating the eighth consular term of the emperor, the elder Vespasian, together with other offices, must next be considered, and, if possible, be given an interpretation that shall be consistent with itself and with other data. They are thus reported by Dr. Seyffarth and Eckhel, (*D. N. VI*, p. 343).

Imp. Caesari Vespasiano Aug. Pontifici Maximo Trib. pot.

VIII. Imp. XVII. pp. Cos. VIII. Diodes IX *censori cet.*

Pontifici Max. . . . Trib. pot. . . . Imp. XVII. Cos. VIII. design.

IX. Conservatori cet.

The two outstanding seriations of offices adverted to are the consular and the imperial. It will be observed that the imperia, or terms of office as emperor, must, in this case as in the decree of Claudius Caesar, be taken to have been semi-annual or six-month periods, if the seventeenth imperial term is to correspond to the eighth consular. Written out in their regular order, these seriations will appear like this:

<i>A.U.C.</i>	<i>Ol.(Eus.)</i>	<i>Imperia</i>	<i>Trib. pot.</i>	<i>Consul.</i>	<i>Nab.</i>	<i>J. P. or A.D.</i>
820—822	212 ³	1	1		816 ¹	4782 69
821—823		2	{ 2	II	817 ²	4783 70
	212 ⁴	3	{ 2	II		70
822—824		4	{ 3	III	818 ³	4784 71
	213 ¹	5	{ 3	III		71
823—825		6	{ 4	IV	819 ⁴	4785 72
	213 ²	7	{ 4	IV		72
824—826		8	—	—	820 ⁵	4786 73
	213 ³	9	—	—		73
825—827		10	{ 5	V	821 ⁶	4787 74
	213 ⁴	11	{ 5	V		74
826—828		12	{ 6	VI	822 ⁷	4788 75
	214 ¹	13	{ 6	VI		75
827—829		14	{ 7	VII	823 ⁸	4789 76
	214 ²	15	{ 7	VII		76
828—830		16	{ 8	VIII	824 ⁹	4790 77
	214 ³	17	{ 8	VIII		77
829—831		18	—	—	825 ¹⁰	4791 78
	214 ⁴	19	—	—		78
830—832		20	9	IX	826 ¹	4792 79
	215 ¹					

According to this scheme, the date particularly signalized by these inscriptions was, and perforce must be, the second half of the Julian year J. P. 4790 or of the Christian Era 77 A. D., thus confirming the commonly accepted view that the eighth consulship of Vespasian was contracted to this twelvemonth by the time-honored associations of public office, and will remain tied up with it till time itself shall end. This leads us to the provision taken in those days to insure a continued succession in office

known as the designation or previous assignment to the consular authority.

It is taken for granted by Dr. Seyffarth in the very first premise of his argument that, "no consul being designated to his consulship sooner than six months previously," in the early days of the republic, it was ever thus, and especially so, in the days of the later empire; and that, because the ninth consulship of right ought to have followed the eighth, therefore it did so follow in natural arithmetical sequence. The argument seems plausible enough, but it is not sound. It does not comport with reason that we should take things as they are, and not as they might or of right ought to be. A few conspicuous examples will suffice to convince any candid student of history that the law of selection for the consulship was not preserved inviolate or observed religiously under imperial domination.

Not to mention the appointment of Julius Caesar to the office of consul for life as a sort of designation or assignment to the consulship, let us here recite only the resolution of the senate and people of Rome by virtue of which the two grandsons of Augustus, Caius and Lucius, were authoritatively, and in due form, *designated consuls*, to enter upon that office, not at the end of *six months*, but at the expiration of *five years*, with permission to be present at the public councils from the day they were brought into the forum. The consulship in which this resolution was passed (see Clinton, *F.H.*, Vol. III, p. 252; Jarvis, *Chron. Intr.*, p. 218) was that of C. Antistius Veter and D. Laelius Balbus. The consulships which intervened and interposed *ten times six months* between the resolution and its actual execution were these:

<i>A.U.C.</i>	<i>Ol. (Eus.)</i>	<i>Consuls.</i>	<i>Nab.</i>	<i>J.P. or B.C.</i>
747 [749]	193 ⁴	Caesar Augustus XII; L. Cornelius Sulla	743 ²⁵	4709 5
748 [750]	194 ¹	C. Calvisius Sabinus II; L. Passienus Rufus	744 ²⁶	4710 4
749 [751]	194 ²	Cn. Cornel. Lentulus; M. Valer. Messalinus	745 ²⁷	4711 3
750 [752]	194 ³	C. Caesar Augustus XIII; M. Plautius Sylvanus	746 ²⁸	4712 2
751 [753]	194 ⁴	Cn. Corn. Lentulus Cossus; L. Calpurnius Piso	747 ²⁹	4713 1

The year in which Caius Caesar administered the consular office was the following 4714th year of the Julian Period or the first, inaugural year of the Christian Era. It evidently did not succeed in immediate sequence upon Caius Caesar's designation to the consular office.

Another outstandingly pertinent example of designation to office more than *six months* in advance of its realization is that of the emperor Claudius, whose prospective fourth investment with

the consular dignity is anticipated by him with an appreciative mention of it in the date of his message to Fadus, the procurator of Judea (see Jos. *Ant. B. XX. C. I.*, §2). He sent the following letter to Fadus: "Claudius Caesar, Germanicus, tribune of the people the *fifth time* and *designated consul the fourth time*, and imperator the *tenth time*, the father of his country, to the magistrates, senate and people, and the whole nation of the Jews, sendeth greeting.... I grant their request, etc.... This is dated the *fourth of the kalends of July* [June twenty-eighth], when Rufus and Pompeius Sylvanus are consuls." Blocked out in chronological array, its date will loom up like this:

A.U.C.(Varro)	Ol.(Eus.)	Imp.	Trib. pot.	Cos.	Nab.	J.P. or A.D.
792—794		1	1	—	788 ¹	4754 41
	205 ³	2	1	—		41
793—795		3	2	II	789 ²	4755 42
	205 ⁴	4	2	2		42
794—796		5	3	III	790 ³	4756 43
	206 ¹	6	3	3		43
795—797		7	4	—	791 ⁴	4757 44
	206 ²	8	4	—		44
796—798		9	5	—	792 ⁵	4758 45
	206 ³	10	5	—		45
797—799		11	6	—	793 ⁶	4759 46
	206 ⁴	12	6	—		46
798—800		13	7	IV	794 ⁷	4760 47
	207 ¹	14	7	4		47

In explanation of this table, it may be observed, before proceeding to the exposition of the date under consideration, that, in another, earlier case, that of the edict of Claudius addressed to the Jews of Alexandria and in other parts of the habitable earth, the date "high-priest, tribune of the people, *chosen consul the second time*," clearly and self-evidently confines this message to the first year of his pontifical, tribunitial and imperial powers. It cannot have pertained to any other year but 41 A. D., when he became emperor under the name and title of Caligula's fourth and last consulship. But, even in this case, the duration of his official standing as "*chosen*," "*elect*" or "*designated*" consul may very well have exceeded the limit of *six months* (or *half a year*) before his entrance upon his second active consulate in 42 A. D., since Caius Caligula was killed as early as the first month of the year 41 A. D. (January twenty-fourth). In the other (later) case, however, our conclusion amounts to an absolute certainty that the epistle of Claudius to his procurator antedated his fourth consulship in 47 A. D. by at least *three times the limit of six months*, as postulated by Dr. Seyffarth; nor does it preclude the possibility of the entire period of his pre-designation to the fourth consulship from exceeding even six times the limits of

six months, for his third term of consular service expired on December thirty-first, 43 A. D., and that was three solid years before his fourth consulship began (January, 47 A. D.). It, consequently, does not follow that, because there once was a time in the days of the early republic, when the designation of consuls was religiously limited to six months ahead of time, therefore the time limitation to six months was also in imperial days confined and limited to six months. The contention of Dr. Seyffarth therefore goes for naught.

It follows, rather, we should think, that more than one distinguished consul was actually elected and declared consul sooner than six months before his inauguration. That Vespasian the elder must have been *designated* consul for his *ninth* term at a time when he himself was not *acting* consul, will appear from the general consensus of historians and statisticians on the duration of his reign. With the exception of Eutropius and the *Chronicon Paschale*, who give him *nine* years, and Clement of Alexandria, who gives him *eleven* years, instead of nine years, eleven months, and twenty-two days, all other authorities give him roundly *ten* years: Suetonius ten years; Dion Cassius ten years minus six days; Ptolemy's *Canon* ten years; Theophilus of Antioch, Cassiodorus and Clement of Alexandria (when corrected) nine years, eleven months, and twenty-two days; and Aurelius Victor ten years. Nor can it be otherwise if it can be shown that Vespasian died on the twenty-third of June (IX. Kal. Jul.), 79 A. D.

T. Flavius Vespasianus was born, as his biographer informs us, in the evening of the seventeenth of November (XV. kal. Decembr.), in the consulship of Q. Sulpicius Camerinus and C. Poppaeus Sabinus, the fifth year before the death of Augustus. This being J. P. 4722 or A. D. 9, his seventieth year (age 69y. 7m. 7d.) would be J. P. $4722 + 70 = 4792$ or A. D. $9 + 70 = 79$ A. D. As he died on the twenty-third of June, he must have passed the epagomenae of Nab. 825, but passed away before he reached the final days of 826: consequently his death occurred in the course of Nab. 826, which corresponded in the main to A. D. 79.

The objection that no coin struck in the tenth year of Vespasian has so far been found in modern times, is entirely nugatory. What numatologist would conclude that, because he had not discovered a certain coin of Carthage or Corinth, Antioch, or Ephesus, therefore such a coin had never been issued? What archaeologist would decide that, because he had never admired the works of art by certain Greek or Roman masters, therefore they had never been seen by anybody else? What biblical scholar would admit that, because he had not beheld with his own eyes the stater drawn from the fish's mouth, therefore no coin like that had ever existed, nor had there ever been such a

fish, nor had there ever been such a lake as the sea of Galilee or such a city as Capernaum, where such a catch had once occurred? Josephus relates (*Wars* B. VII. C. V. §1) that, about this time, there existed a river in the middle between Arcea and Raphanea, "of such a nature as deserves to be recorded in history." In the words of the Jewish historian, "when it runs, its current is strong, and has plenty of water; after which its springs fail for six days together, and leave its channel dry, as anyone may see; after which days it runs on the seventh day as it did before, and as though it had undergone no change at all: it hath also been observed to keep this order perpetually and exactly; whence it is that they call it the Sabbatic River,—that same being taken from the sacred seventh day of the Jews." But though it is now vanished, and no longer observable as it was of yore, who will say that it never did so flow intermittently in that day? In like manner, who will say that, because the said coin of Vespasian's tenth regnal year is not at present extant and publicly on exhibition, therefore it never did exist and was never in circulation?

Obviously an intermission of twelve months is inexorably required between the *eighth* and the *ninth* consulship of the emperor; we are not, however, compelled to draw upon our inventive ability or the resourcefulness of modern critics. The ancient compilers of consular lists, Cassiodorus and Victorius, though in transposed order, supply the demand in the consulate of Commodus and Rufus. Moreover, an ancient inscription produced by Bianchini, from *Spon. Miscell. Erud. sec. 2*, art. 2, then placed in a villa called Montalto, and existing in the time of Muratori in the museum of Cardinal Albani, is given thus by Dr. Jarvis (*Chron. Intr.*, p. 299): C. Cejonius Commodus and D. Novius Priscus. The three concluding consulates of Vespasian's reign are, therefore, recorded thus:

4. U.C. (Varro) Ol. (Eus.)		Consuls.	Nab. J.P. or A.D.		
828—830	214 ³	Vespasianus Aug. VIII; Titus Caesar VI.	824 ⁹	4790	77
829—831	214 ⁴	C. Cejonius Commodus; D. Novius Priscus	825 ¹⁰	4791	78
830—832	215 ¹	Vespasianus Aug. IX; Titus Caesar VII.	826 ¹	4792	79

With profound satisfaction we note the conclusion of this period of history, because with it we close, as it were, the gates of the temple of Janus, even as Vespasianus did at the beginning of his reign, in token of the termination of the apparently, interminable contention of conflicting schools. We trust our fellow-students, if any have followed us thus far, will be equally grateful for the elimination of at least one of our everlasting alternatives; for, as Dr. Jarvis remarks: "We have now come into the region of more accurate history!"

When we say "more accurate history," we mean, of course,

in the sense of "less impugned" or "less disputed," for, of a truth, history could hardly be more exact and authentic than we have seen it recorded in the last one hundred and forty years, if we but know how to read the records. To illustrate just what we mean, let us briefly reconsider the interpretation given Ptolemy's *Canon*, which we have already essayed in a previous chapter. In the version of the only dissenting school of chronology remaining, "it is merely a tally of Thoth first, or of the Nabonassan New Years' days passed over by the reigns severally and respectively, the corresponding vague years being assigned to the rulers against whom they appear." (Totten, *Our Race*, No. 16, p. 352) But, on the one hand, the unaccountable omission of the last "first of Thoth" in the life of Antoninus Pius [Nab. 908] from the last reign of kings recorded in the *Astronomical Canon* ought to indicate clearly enough that this was *not* the method of keeping the count in Ptolemy's system of chronology. On the other hand, the fact that the bulk of the year 828 Nab. is bodily excluded from the life of Titus if the position of his reign in the *Canon* is decided by the New Years' days of Nab. 826, 827 and 828. Almost eleven months of his last regnal year are left out of his life time altogether. We are therefore constrained to believe that the Alexandrian astronomer computed the years of his *Canon*, not by the *primal*, but by the *final*, days of the year. This principle of interpretation will give to Titus the years of grace 79, 80 and 81 A. D., or to be more exact, the two years, two months and twenty days, from June twenty-fourth, 79 A. D., to September thirteenth, 81 A. D.

To facilitate the survey of his successor's consulates in particular, let us here insert all the elect as well as all the leading consulates of the two Vespasians' and Domitian's reigns.

<i>A.U.C.(Varro)</i>	<i>Ol.(Eus.)</i>		<i>Consuls.</i>	<i>Nab.</i>	<i>J.P. or A.D.</i>	
821—823	212 ⁴	Ex Kal. Jan.	T. Flavius Vespasianus II	817 ²	4783	70
			Titus Caesar Vespasianus			
		Ex Kal. Jul.	C. Licinius Mucianus II.			
			P. Valerius Asiaticus			
		Ex Kal. Nov.	L. Annius Bassus			
			C. Caecina Paetus			
822—824		Ex Kal. Jan.	T. Flavius Vespasianus III.	818 ³	4784	71
	213 ¹		M. Cocceius Nerva			
		Ex Kal. Mart.	T. Caesar Domitianus			
			Cn. Pedius Castus			
			C. Valerius Festus			
823—825		Ex Kal. Jan.	T. Flavius Vespasianus IV.	819 ⁴	4785	72
	213 ²		Titus Caesar Vespasianus II.			
824—826		Ex Kal. Jan.	T. Caesar Domitianus II.	820 ⁵	4786	73
	213 ³		M. Valerius Messalinus			
825—827		Ex Kal. Jan.	T. Glavius Vespasianus V.	821 ⁶	4787	74
	213 ⁴		Titus Caesar Vespasianus III.			
		Ex Kal. Jul.	T. Caesar Domitianus III.			

<i>A.U.C. (Varro) Ol. (Eus.)</i>		<i>Consuls.</i>	<i>Nab. J.P. or A.D.</i>
826—828	214 ¹	Ex Kal. Jan. T. Flavius Vespasianus VI. Titus Caesar Vespasianus IV.	822 ⁷ 4788 75
		Ex Kal. Jul. T. Caesar Domitianus IV. M. Licinius Mucianus III.	
827—829	214 ²	Ex Kal. Jan. T. Flavius Vespasianus VII. 823 ⁸ Titus Caesar Vespasianus V.	4789 76
		Ex Kal. Jul. T. Caesar Domitianus V. T. Plautius Silv. Aelianus II.	
828—830	214 ³	Ex Kal. Jan. T. Flavius Vespasianus VIII. 824 ⁹ Titus Caesar Vespasianus VI.	4790 77
		Ex Kal. Jul. T. Caesar Domitianus VI. Cn. Julius Agricola	
829—831	214 ⁴	Ex Kal. Jan. L. Ceionius Commodus 825 ¹⁰ D. Novius Priscus	4791 78
830—832	215 ¹	Ex Kal. Jan. T. Flavius Vespasianus IX. 826 ¹ Titus Caesar Vespasianus VII.	4792 79
831—833	215 ²	Ex Kal. Jan. Titus Caesar Vespasianus VIII. 827 ² T. Caesar Domitianus VII.	4793 80
		Suff. { L. Aelius Plautius Lamia Q. Pactumeius Fronto	
		Suff. { M. Tillius (Tillius) Frugi T. Vinicius Julianus	
832—834	215 ³	Ex Kal. Jan. L. Flavius Silva Nonius Bassus 828 ³ Asinius Pollio Verrucosis	4794 81
		Ex Kal. Mai. L. Vettius Paullus T. Junius Montanus	
833—835	215 ⁴	Ex Kal. Jan. T. Flavius Domitianus VIII. 829 ¹ T. Flavius Sabinus	4795 82
834—836	216 ¹	Ex Kal. Jan. T. Flavius Domitianus IX. 830 ² Q. Petilius Rufus II.	4796 83
835—837	216 ²	Ex Kal. Jan. T. Flavius Domitianus X. 831 ³ T. Aurelius Sabinus	4797 84
836—838	216 ³	Ex Kal. Jan. T. Flavius Domitianus XI. 832 ⁴ T. Aurelius Fulvius	4798 85
837—839	216 ⁴	Ex Kal. Jan. T. Flavius Domitianus XII. 833 ⁵ Ser. Cornelius Dolabella	4799 86
838—840	217 ¹	Ex Kal. Jan. T. Flavius Domitianus XIII. 834 ⁶ Q. Volusius Saturninus	4800 87
839—841	217 ²	Ex Kal. Jan. T. Flavius Domitianus XIV. 835 ⁷ L. Minucius Rufus	4801 88
840—842	217 ³	Ex Kal. Jan. T. Aurelius Fulvius II. 836 ⁸ A. Sempronius Atratinus	4802 89
841—843	217 ⁴	Ex Kal. Jan. T. Flavius Domitianus XV. 837 ⁹ M. Cocceius Nerva	4803 90
842—844	218 ¹	Ex Kal. Jan. M. Ulpius Trajanus 838 ¹⁰ M. Acilius Glabrio	4804 91
843—845	218 ²	Ex Kal. Jan. T. Flavius Domitianus XVI. 839 ¹¹ Q. Volusius Saturninus	4805 92

<i>A.U.C.(Varro) Ol.(Eus.)</i>		<i>Consuls.</i>	<i>Nab. J.P. or A.D.</i>
844—846		Pompeius Collega	840 ¹² 4806 93
	218 ³	Cornelius Priscus	
845—847		Asprenas	841 ¹³ 4807 94
	218 ⁴	Clemens Lateranus	
846—848		T. Flavius Domitianus	
		XVII.	842 ¹⁴ 4808 95
	219 ¹	T. Flavius Clemens II.	
847—849		C. Antistius Vetus	843 ¹⁵ 4809 96
	219 ²	C. Manlius Valens	

From this exhaustive scheme it will be easily observed that Suetonius is right in regard to both the subordinate and the ordinary consulates of Domitian. Referring to the administrations served under his father, Suetonius says that "of the six consulships which he held, only one was ordinary," that of A. D. 73. Speaking of the whole number of terms administered by Domitian, the same biographer says: "He filled the office of consul *seventeen* times, which no one had ever done before him, and for the seven middle occasions in successive years; but in scarcely any of them had he more than the title; for he never continued in office beyond the kalends of May, and for the most part only till the ides of January" (Suet. *Dom. C. XIII*).

For an emplacement of the seven consecutive consulates at the beginning of Domitian's independent rule, which shall in the end represent a solid block of years, impregnable to the most powerful onslaughts of the anachronistic school, it will be sufficient to set forth the firm foundation of two of them, the XIIth and XIVth. This may be done, not only by the now officially recognized computation of Varro, as employed by Censorinus, but by the series of years constituting the life-time or age of Antoninus Pius. In the former case, speaking of the renewed celebration of the secular games, the testimony of Censorinus is explicit and to the point, that the term of consular authority, in which the games were celebrated for the seventh time, was that of Domitian XIV and L. Minucius Rufus, and that that coincided with the year of Rome [according to Varro] 841 (*De Die Nat. C. XVII*). But A. U. C. 841 conformed wholly or in part to the Julian year J. P. 4801 or 88 A. D. Therefore the consulate of Domitian XIVth and Minucius Rufus also conforms to the 4801st year of the Julian Period or the eighty-eighth year of the Christian Era.

In the latter case, referring to the lustrum and quinquennial games, then first instituted by Domitian, the description given by Censorinus (*De Die Natali, C. xviii*) of the then current consulship is equally clean-cut and accurate. He says that these capitoline contests were first instituted by Domitian in his twelfth

consulship with Servius Cornelius Dolabella, consequently two years earlier, in A. U. C. 839 (according to Varro) or in A. D. 86. The same consulship, while distinguishing itself by the birth of the illustrious emperor, Aurelius Antoninus Pius, also establishes the date of that birth beyond cavil. This prince of emperors was born, as Julius Capitolinus informs us, on the XIII. kal. October (or September nineteenth) in the consulship of Domitian XII and Cornelius Dolabella. He died, after attaining an age of 74y. 5m. 18d. (according to Dr. Jarvis' own reckoning), in the consulate entitled "Antoninus V and Aurelius III," and also styled that of the "Two Augusti"—the same, which, written out in full, reads thus: "M. Aurelius Verus Antoninus Caesar III; L. Aelius Aurelius Verus Caesar II." Now this very consulate, so diversely and confusingly stated, is the point at issue between the school of commonly accepted chronology and the recalcitrant group of "earlier occurrence" chronology. To avoid the appearance of double-dealing and to actually steer clear of confusion in the premises, we shall fall back upon an unimpeachable and impregnable *terminus a quo* by including the reign of Antoninus Commodus in our calculation. This prince of Rome was "born on the thirty-first day of August (*pridie kal. Septembr.*), in the year in which *his father and his uncle were consuls*" (*Hist. Aug.* s. 5, p. 45 B). After a brief life of thirty-one years and four months, Commodus was poisoned and then suffocated on the last day of the year known as his own seventh consulship or Commodus VII and Pertinax, therefore, on December thirty-first, A. D. 192. If, then, from such a starting-point, unimpugned and incontestable, we reckon backwards, 31y. 4m., as the age of Commodus, plus 5m. 25d. for the interval between the birth of Commodus (on August thirty-first) and the death of Antoninus Pius on March sixth, plus the age of Antoninus, 74y. 5m. 18d., that is to say, 106y. 3m. 13d. in all, and subtract this amount of time from the 192 years of the Christian Era transpired at the death of Commodus, or $192 = 191\text{y. } 11\text{m. } 31\text{d.} - 106\text{y. } 3\text{m. } 13\text{d.}$, the remainder will be 85y. 8m. 18d., as the amount of time in the Christian Era elapsed before the birth of Antoninus Pius. Expressed in words, these figures mean that, 85y. 8m. 18d. of the Era having preceded the nativity of Antoninus Pius, this emperor was born on the nineteenth of September of the year 86 A. D. That year was the consulship of Domitian XII and Cornelius Dolabella, as stated in the roster of consulships, the 839th year from the building of Rome (according to Varro), the 883^d year of the Nabonassan Era, and the 4799th year of the Julian Period. It follows, then, that the location of Domitian's seven consecutive consulships, and, for that matter, all fifteen regnal years of

Domitian, as commonly emplaced, is correct, and that they must not be dislodged and misplaced a whole year higher up.

But there are other elements of chronology, says Prof. Totten (*Our Race*, No. 16, pp. 361 and 368), which fix the twelfth and thirteenth years of Domitian to 92 and 93 A. D. respectively, and the first of Trajan to 97 A. D. instead of 98 A. D. "In fact," says he, "it is sufficient to establish our position and interpretation of the *Canon*, had we to depend upon it without any other evidence."

The conjunction of the moon with the Pleiades, which is here alluded to by Prof. Totten, and is recorded by Ptolemy in his *Almagest*, was an object of observation by Agrippa in Bithynia as it occurred on the second day of Tybi of the 840th year of the Nabonassan Era, in the then current twelfth year of Domitian. This occultation of Pleiades by the moon has been recalculated and verified by modern astronomers, and found to have happened on November twenty-ninth, 92 A. D. Now it is true that this date would have been included in the thirteenth year of Domitian's actual government, as claimed by the anachronistic school, if the canonical twelfth year of his sway had been determined by the first of Thoth instead of the last of the epagomenae. But since, as we have seen, it is the plan and underlying principle of Ptolemy's *Canon*, to count what is past and gone in full vague years, not what is begun but left undone in fractional, unfinished quantities, it is not correct to say that the twelfth year of Domitian was defined and fixed by the New Year's day of Nab. 840. The "*twelfth year of Domitian*," like all dates brought into connection with the *Astronomical Canon*, is determined by the eschathemeron of the specified year. To constitute the 840th year of the Nabonassan Era *the twelfth year of Domitian*, it was necessary that the final days, the eschathemera or epagomenae, of Nab. 840 should be embraced and embodied in the twelfth year of actual government, in other words, that the twelfth year of actual rule, fractional or full, should have taken in and contained the closing day of the year, which, then complemented and complete, was thus to be incorporated in the canonical count as a year in all respects equal and equivalent to all the rest of its uniform and consistently vague fellows. It is, therefore, inexorably to be expected of the twelfth year of Domitian that it terminate somewhere behind the concluding days of Nab. 840. It may conclude its days so little as a day after the final of the Egyptian year, as in the case of Tiberius, or it may begin it only a few days before the Egyptian "last," as in the case of Augustus, but it must take in and contain the "last." In the case before us, "*the twelfth year of Domitian*" can have comprehended the last days of Nab. 840 only if it began on September thirteenth, 92

A. D., and ended September twelfth, 93 A. D. This emplacement would be consistent with the general computation of his years and with the consignment of the *Canon*. So then, whether historically or hieratically computed, the obscuration of the Pleiades by the moon on November twenty-ninth, 92 A. D., must have happened in the twelfth year of Domitian, which is thus forever anchored in the 4805th year of the Julian Period, as affirmed by the school of commonly accepted chronology.

The only other two astronomic elements of the first century A. D. referred to by Ptolemy in his *Almagest* amount to the same thing. A transit of the moon over the star Spica Virginis on Mechri fifteenth, Nab. 845, and an occultation of Antares or B Scorpii by the moon on Mechri eighteenth, Nab. 845, were observed at Rome by Menelaus, the mathematician. These phenomena, too, have been carefully re-examined and verified by modern scientists. The former is found to have occurred on January eleventh, the latter on January fourteenth, 98 A. D. or J. P. 4811. Both are said to have occurred in the first year of the emperor Trajan. We may therefore register the consulates of the intervening reign of Nerva and then proceed to that of Trajan.

Since M. Cocceius Nerva succeeded Domitian September nineteenth, in the consulship of C. Antistius Vetus and C. Manlius Valens, and died on the twenty-seventh day of his second consulship while emperor, it is easy to see why his brief reign of one year, four months and nine days should be considered one of supreme importance. The *one* year of empire assigned to him by Ptolemy in his *Canon* is Nab. 844. This vague Egyptian year extended from the thirtieth of July, 96 A. D., to the twenty-ninth of July, 97 A. D., according to the computation of all schools of chronology. If, now, the one and only full year of Nerva's actual reign extended, as Dr. Jarvis and Prof. Totten say it did, from the nineteenth of September, 95 A. D., to the eighteenth of September, 96 A. D., then this one and only regnal year of this emperor in Ptolemy's *Canon* was almost wholly and entirely postmortem. What value such a reign in the realm of departed spirits may have, is not for us to decide. Suffice it to say that Nerva's reign, when meted out in its own appropriate place, from the nineteenth of September, 96 A. D., to the twenty-seventh of January, 98 A. D., so obviously occupies its rightful place that it incorporates the crowning day of Nab. 844, Epagomena fifth, or July twenty-ninth, 97 A. D., as the 314th of its 496 days. If, therefore, we had no other norm or standard to go by but Ptolemy's *Canon*, we should group the consular terms of Nerva's reign about this almost central date in the following manner:

<i>A. U. C. (Varro) Ol. (Eus.)</i>		<i>Consuls.</i>	<i>Nab. J. P. or A. D.</i>	
847—849	219 ²	C. Antistius Vetus; C. Manlius Valens	843 ¹⁵	4809 96
848—850	219 ³	M. Cocceius Nerva III; Verginius Rufus III.	844 ¹	4810 97
849—851	219 ⁴	M. Cocceius Nerva IV; Ulpius Trajanus II.	845 ¹	4811 98

It would seem a fairly self-evident conclusion that, in such a natural sequence of things, there could be no exception taken to the proposition that Trajan's illustrious administration of imperial rule followed Nerva's and Domitian's reign in the year of grace 98 A. D. as obviously as daylight follows dawn and night. Yet, in the face of such supposedly scientific disquisitions as the works of Dr. Jarvis and Prof. Totten, it is mandatory on us to examine their assertion that, if no other, this is a case of earlier occurrence which demands an emplacement of events a year in advance of the date set by the commonly received chronology. It is affirmed that the two astronomic phenomena referred to by Ptolemy as happening on the fifteenth and eighteenth of Mechri, Nab. 845, or, in our own Julian terminology, on the eleventh and fourteenth of January, 98 A. D., not only adjust "the accession of Trajan to January twenty-eighth, 97 A. D.," but also fix "that of *all* the precedent Caesars one year earlier than the text-books allow." We must therefore get ourselves to see as plainly as possible in just what relation to this "very important date" the first imperial year of Trajan must be placed.

Trajan's sole exercise of sovereignty began, as we have seen, on the twenty-eighth of January of that year in which he was associate consul with his predecessor, the emperor Nerva. He concluded as emperor the year he had begun as second-time consul. This was the year of Rome 851 (according to Varro), or the Julian year J. P. 4811 = 98 A. D. If, then, the occultations by the moon of Spica Virginis and of Antares or B Scorpii occurred respectively on the eleventh and fourteenth of January, 98 A. D., they occurred, indeed, while Trajan was only consul, and not yet emperor, but, according to the canonical, time-honored hieratic mode of reckoning by prolepsis, they took place wholly within the bounds of the Nabonassan year 845. Now Ptolemy computed his dates by Nabonassan, not by Julian or Roman consular years. According to this mode of reckoning, the fifteenth and eighteenth of Mechri were respectively the 165th and 168th days of the Egyptian and Ptolemaic Canonical year Nab. 845. So the astronomer's statement that the occultations described took place in the first canonical year ascribed to Trajan is absolutely correct. Since, then, the scientist of Alexandria saw fit to execute his computations consistently in vague,

but uniformly full and solid Egyptian years, we are bound, if we wish to verify his work and do it fairly, to do likewise.

Now the first and next Nabonassan year, subsequent to the reign of Nerva, was 845. This, it is conceded, is canonized as the first regnal year of the emperor Trajan. It extended from Thoth first on July thirtieth, 97 A. D., to Epag. fifth on July twenty-ninth, 98 A. D. Now the time duration of this perfectly defined Egyptian year must have been "fulfilled" within the course of the first actual year of Trajan before it could be ascribed and accredited to him. The day of days on which alone it was "consummated," was the twenty-ninth of July, A. D. 98. If, then, Trajan was in possession of the title and dignity of Roman emperor, even for only a day before, aye, for that very day, the twenty-ninth of July itself, *his* was then and there the Nabonassan year 845. As we have observed in passing, this first year of Trajan did actually and automatically, include and contain the last day of Nab. 845 (July twenty-ninth). It marshalled 182 days of its duration in the fore, and 182 days in the rear, of the twenty-ninth of July, 98 A. D. No prize could ever be captured by a manoeuver more consummately perfect. This catch was central.

Being thus satisfied that the appropriation of Nab. 845 as the first tally for Trajan is correctly interpreted if meant to imply that its consummation was effected within the scope of the emperor's first year of actual government, we may now take up the registration of the consuls who served in that capacity under Trajan.

The first pair of consuls usually, or rather universally, advanced as such under Trajan, excites our surprise or suspicion, not so much on account of their personality as because of the unwonted position in which they here appear. As it was a generally observed custom to invest the new emperor with the consular dignity in the very first year after his accession, [witness the introductory consulships of Claudius II, Nero I, Galba II, Vespasian II, Titus VIII, Domitian VIII, Nerva III, and so forth] we suspect that a mistake was made here in raising a subordinate or substitute consulship, that of Palma and Senecio, to the rank of a regular or ordinary office. We therefore suggest that this set of names be, tentatively at least, omitted. Except for this elimination, we agree with Dr. Jarvis as to the personnel and the emplacement of the next twenty-nine consulships, all of those belonging to the reign of Trajan, and, additionally, eleven of those pertaining to the reign of Adrian. The consuls belonging to the former reign are these:—

A. U. C. (Varro)	Ol. (Eus.)	Consuls.	Nab.	J. P. or A. D.
849—851	219 ⁴	M. Cocceius Nerva IV; Ulpian Trajanus II	845 ¹	4811 98
850—852	220 ¹	Trajanus Imp. Aug. III ; S. Julius Frontinus III	846 ²	4812 99
851—853	220 ²	Trajanus Imp. Aug. IV ; S. Articuleius Paetus	847 ³	4813 100
852—854	220 ³	C. Sosius Senecio III; L. Licinius Sura II	848 ⁴	4814 101
853—855	220 ⁴	Trajanus Imp. Aug. V ; Maximus	849 ⁵	4815 102
854—856	221 ¹	Suburanus II; Marcellus	850 ⁶	4816 103
855—857	221 ²	Tib. Julius Candidus; C. Quadratus	851 ⁷	4817 104
856—858	221 ³	Aelius Commodus Verus; L. Furius Cerealis	852 ⁸	4818 105
857—859	221 ⁴	L. Licinius Sura III; C. Sosius Senecio IV.	853 ⁹	4819 106
858—860	222 ¹	Ap. An. Trebonius Gallus; M. Atil. Metil Bradua	854 ¹⁰	4820 107
859—861	222 ²	A. Cornelius Palma II; C. Calvisius Tullus II.	855 ¹¹	4821 108
860—862	222 ³	Ser. Salvidienus Orfitus; M. Peducaeus Priscinus	856 ¹²	4822 109
861—863	222 ⁴	C. Calpurnius Piso; M. Vettius Bolanus	857 ¹³	4823 110
862—864	223 ¹	Trajanus Imp. Aug. VI ; T. Sextius Africanus	858 ¹⁴	4824 111
863—865	223 ²	L. Publicius Celsus II; L. Clodius Crispinus	859 ¹⁵	4825 112
864—866	223 ³	Q. Minnius Hasta; P. Manilius Vopiscus	860 ¹⁶	4826 113
865—867	223 ⁴	L. Vipstanius Messala; M. Vergilianus Pedo	861 ¹⁷	4827 114
866—868	224 ¹	L. Aelius Lamia; Aelianus Vetus	862 ¹⁸	4828 115
867—869	224 ²	Quinctius Niger; C. Vipstanius Apronianus	863 ¹⁹	4829 116

This sterile list of consuls and a few statistical data as to the length of Trajan's reign, is all the chronological material we have in regard to it. Nearly all the authorities—St. Clement of Alexandria, St. Theophilus of Antioch, Dion Cassius, Eutropius, and Cassiodorus—affirm that Trajan reigned more than six months above *nineteen* years, Sextus Aurelius Victor even *twenty*, while the *Chronicon Paschale* and Ptolemy's *Canon* make it roundly *nineteen years*. That none of these figures can be right, excepting the last, in the sense that even the *nineteenth* year was not complete, will be abundantly manifest from the emplacement enforced by a rigid interpretation of Ptolemy's *Canon*, and the copious evidence afforded by the succeeding imperial sway.

Since Adrian, Trajan's successor, while legate in Syria, received letters of adoption on the ninth of August (V. Idus Aug.) and, two days later, received news of Trajan's death on August eleventh (III Idus Aug.), it may be assumed that Trajan died about this time. His regnal years had begun on January twenty-eighth. If, then, the emperor began his nineteenth regnal year on January twenty-eighth, 116 A. D., and died on or about the eleventh of August, his last term consisted of approximately six months and a few days. He had just passed the last day of Nab. 863, which, in the year 116 A. D., fell on the twenty-fourth of July, by eighteen days. And since he did not survive another vague Egyptian year, his reign lasted only eighteen years, six months, and fifteen days, viz. from the twenty-eighth of January, 98 A. D., to August eleventh, 116 A. D.

As if to compensate for the remarkable meagerness of chronological matter afforded by the reign of the best of the Caesars, the reign of Hadrian, or Adrian, is proportionately rich and replete with an incomparable wealth of time-noting material. Every one of his regnal years, from the eleventh to the twenty-first, is punctuated by at least one astronomical observation, so that, even if we had a desire to shift this period of imperial sway either a year upward or a year downward, we could not do so. Its precision as well as solidarity of position is so absolutely and infinitely certain that we must perforce abstain from entering on a minute and thorough-going discussion of every detail. We must be content with a mere catalogue of the planetary conjunctions and contingencies recorded for this reign or look them up in the more erudite works of science pertaining to the subject. We will previously take note only of the *first*, *third*, *fourth*, and *ninth* consulates of this reign, as they are rendered notable by their connection with the Seleucic Era and with the nativities of M. Aurelius and Helvius Pertinax.

The *first* year of Adrian, during which he was legate of Syria, was deferentially memorialized by a coin of Tripoli, as the 428th year of the Seleucic Era, which roughly speaking, corresponded to the period in Julian time from October first, 116 A. D., to September thirtieth, 117 A. D. Had Hadrian's regnal year commenced on August eleventh, 117 A. D., the greater part of Sel. 428 had then already elapsed and well-nigh expired before a coin could be struck in worshipful commemoration of his auspicious exaltation. In the alternate case, however, if it occurred on the eleventh of August, 116 A. D., the entire civil year was before them for their disposal.

The *third* regnal year of Adrian, more specifically marked out as the consulship of Severus and Fulgus, is intimately linked with the 430th year of the Seleucid Era. "In the year 430 (J. P. 4832 or 119 A. D., under the reign of Hadrianus Caesar, in the consulship of Severus and Fulgus, and the episcopate of Xystus [Sixtus I] bishop of the city of Rome," a council was assembled at Rome to deal with questions relating to the story of the infancy of Jesus in the early chapters of Matthew (see Bacon's *Fourth Gospel*, p. 220). In the judgment of Hilgenfeld (*Das komon. Mter. in zts. f. wiss. Theol.*, 1895, p. 449) this date must rest on authentic data. It fixes the commencement of the consular term of L. Catilius Severus and T. Aurelius Fulvius Antoninus irrevocably to the kalends first of January, J. P. 4832 or 119 A. D., which is the only regular inauguration-day incident in the limits of the Seleucic year 430. It also makes this consulate of Severus and Fulvius the third term to give its name and title to the reign of Hadrian.

The *fourth* imperial year of Hadrian is indissolubly connected with the consulate of Verus II and Augur by the birth and life-years of the later emperor, Marcus Aurelius. Figuring back from the incontestable date of his death, March seventeenth, 179 A. D., fifty-eight years, ten months and twenty-two days will carry us back to his birthday, which, according to Julius Capitolinus, occurred on the twenty-sixth of April (VI. Kal. Maias), when Annius Verus II and Augur were consuls, in the year of Rome 873 or the Julian year J. P. 4833 = 120 A. D. As this Verus was the grandfather of Marcus, it is not probable that a mistake could be made in the name of the consuls. Nor is it possible that a mistake could be made in the emplacement of Verus' second consulate, since it was bound to follow in immediate sequence the consulship of Severus and Fulgus.

The *ninth* (like the *fourth*) regnal year of emperor Hadrian is irrefragably linked with the name of Verus, who in this year as well as the other, was consul again, this time in comradeship with L. Varius Ambibulus. This third-term consulship of Annius Verus is bound to the *ninth* year of Hadrian in the same manner as the second term was to the fourth, by the birth and age of Pertinax, who became emperor on January first, 193 A. D., upon the death of Commodus the day before. Pertinax ruled only eighty-seven days. He was slain at the age of sixty-seven years, seven months and twenty-eight days, which, being deducted (March 28, 193 = 192y. 2m. 28d. — 67y. 7m. 28d. = 124 yrs. 7 mos. 0 d), or, in plain-spoken vernacular, yields the first of August, 125 A. D. As Julius Capitolinus declares that Pertinax was born in the year when Verus and Bibulus were consuls, their consulship must have been identical with the year of the Julian Period 4838 or of the Christian Era 125, and that consular year was the *ninth* regnal year of Hadrian.

With this *ninth* regnal year of Hadrian, we might say, begins the spectacular and well-nigh sensational display of astronomical observations by which the reign of Hadrian is distinguished and honored above all others. There is a veritable superabundance of chronological evidence at our command. In order, therefore, to avoid a redundancy of ideas and a fruitless repetition of mere verbiage, we will simply put down a complete list of all the phenomena referred to, without comment or correction, as found in Guinness' *Light for the Last Days*, pp. 404–411. In the order of Hadrian's regnal years, they occurred as follows:—

9th year	Lunar Eclipse	Pachon 17,	Nab. 872	April	5, 125 A.D.
11th year	Observ. on Saturn	Pachon 7,	Nab. 874	Mar.	26, 127 A.D.
12th year	Observ. on Venus	Athyr 21	Nab. 875	Oct.	12, 127 A.D.
13th year	Observ. on Venus	Epiphi 2	Nab. 876	May	20, 129 A.D.
14th year	Observ. on Mercury	Mesore 18	Nab. 877	July	4, 130 A.D.

15th year	Observ. on Mars	Tybi 26	Nab. 878	Dec. 15, 130 A.D.
16th year	Observ. on Mercury	Phamenoth 16	Nab. 879	Feb. 2, 132 A.D.
16th year	Observ. on Venus	Pharmuthi 2	Nab. 879	Feb. 18, 132 A.D.
17th year	Autumnal Equinox	Athyr 7	Nab. 880	Sept. 25, 132 A.D.
17th year	Eclipse of the Moon	Paymi 20	Nab. 880	May 6, 133 A.D.
17th year	Observ. on Jupiter	Epiphi 1	Nab. 880	May 17, 133 A.D.
17th year	Observ. on Saturn	Epiphi 18	Nab. 880	June 3, 133 A.D.
18th year	Observ. on Venus	Pharmuthi 2	Nab. 881	Feb. 18, 134 A.D.
18th year	Observ. on Mercury	Epiphi 18	Nab. 881	June 4, 134 A.D.
19th year	Observ. on Mercury	Athyr 14	Nab. 882	Oct. 3, 134 A.D.
19th year	Eclipse of the Moon	Choeac 2	Nab. 882	Oct. 20, 134 A.D.
19th year	Observ. on Mars	Pharmuthi 6	Nab. 882	Feb. 21, 135 A.D.
19th year	Observ. on Mercury	Pachon 19	Nab. 882	April 5, 135 A.D.
20th year	Culmination of Moon	Athyr 13	Nab. 883	Oct. 1, 135 A.D.
20th year	Eclipse of the Moon	Pharmuthi 19	Nab. 883	Mar. 5-6, 136 A.D.
20th year	Observ. on Saturn	Mesore 24	Nab. 883	July 8, 136 A.D.
21st year	Observ. on Jupiter	Paophi 13	Nab. 884	Aug. 31, 137 A.D.
21st year	Observ. on Venus	Tybi 21	Nab. 884	Nov. 18, 137 A.D.
21st year	Observ. on Venus	Mechir 9	Nab. 884	Dec. 25, 137 A.D.

This pyrotechnical display, however amazing it may be, is not on that account terminated by the end of Hadrian's life-time or reign. On the contrary, it is continued for three successive years into the reign of Antoninus Pius, and serves permanently to fix the boundaries of that realm. Since Ptolemy ascribes Nab. 884, the "final" of which fell on July nineteenth, 137, to Hadrian as his last canonical year, while his death-day fell on July tenth, it is necessary to get this death-day accurately determined before we can say that we know when Hadrian died.

If Adrian died, as Spartian says (*H. Aug.* SS. 12), on the tenth of July [*die sextum Iduum Juliarum*] after a lifetime of seventy-two [l. 62] yrs. five mos., and seventeen days, the tenth of July intended cannot have been the tenth of that month in 137 A. D. (for then this age, counting from January twenty-fourth, 76 A. D., had not yet been attained, and his last canonical year would not have been completed.) But if, on the other hand, we apprehend the tenth of July to have been that of the year J. P. 4851 or 138 A. D., the day of his death will lie well back of the end of Nab. 884 and the age of the emperor is fulfilled, as Spartian, his biographer, declares it to have been. Furthermore we also find that Spartian's estimate of Adrian's reign, twenty-one years and eleven months, is likewise correct, compensating for the loss of a year in the reign of Trajan. We therefore unhesitatingly join in the general consensus of opinion that Adrian's death occurred on the tenth of July, J. P. 4851 or 138 A. D., almost twelve months after the close of his twenty-first and last year in Ptolemy's *Canon*, Nab. 884. The array of annual consulships in Hadrian's reign bears out the same result. They are:

<i>A. U.C. (Varro) Ol. (Eus.)</i>		<i>Consuls.</i>	<i>Nab. J.P. or A.D.</i>		
868—870	224 ³	Aelius Hadrianus Imp.; Tib. Claud. Fuscus Salinator	864 ¹	4830	117
869—871	224 ⁴	Ael. Hadrianus Imp. II; Q. Junius Rusticus	865 ²	4831	118
870—872	225 ¹	L. Catilius Severus; T. Aurel. Fulvius Antoninus	866 ³	4832	119
871—873	225 ²	Annius Verus II; Aurelius Augur	867 ⁴	4833	120
872—874	225 ³	M'. Acilius Aviola; C. Cornelius Pansa	868 ⁵	4834	121
873—875	225 ⁴	Q. Arrius Paetinus; C. Ventidius Apronianus	869 ⁶	4835	122
874—876	226 ¹	M. Acilius Glabrio; C. Bellicius Torquatus	870 ⁷	4836	123
875—877	226 ²	P. Corn. Scipio Asiaticus II; Q. Vettius Aquilinus	871 ⁸	4837	124
876—878	226 ³	M. Annius Verus III; L. Varius Ambibulus	872 ⁹	4838	125
877—879	226 ⁴	Titianus; Gallicanus	873 ¹⁰	4839	126
878—880	227 ¹	L. Non. Aspr. Torquatus II; M. Annius Libo	874 ¹¹	4840	127
879—881	227 ²	Vetus; Valens	875 ¹²	4841	128
880—882	227 ³	Q. Julius Balbus; P. Juventius Celsus II.	876 ¹³	4842	129
881—883	227 ⁴	Q. Fabius Catullinus; M. Flavius Aper	877 ¹⁴	4843	130
882—884	228 ¹	Ser. Oct. Laenas Pontianus; M. Antonius Rufinus	878 ¹⁵	4844	131
883—885	228 ²	Sentius Augurinus; Sergianus or Severianus	879 ¹⁶	4845	132
884—886	228 ³	Antonius Hiberus; Nummius Sisenna	880 ¹⁷	4846	133
885—887	228 ⁴	C. Julius Servianus III; C. Vibius Varus	881 ¹⁸	4847	134
886—888	229 ¹	Pontianus; Atilianus	882 ¹⁹	4848	135
887—889	229 ²	L. Cejon. Com. Verus; Sex Vet. Circa Pompeianus	883 ²⁰	4849	136
888—890	229 ³	L. Aelius Verus Caesar II; P. Caelius Balbin Vibulus	884 ²¹	4850	137
889—891	229 ⁴	Camerinus; Niger	885 ¹	4851	138

Due to the fact that the death of Hadrian occurred very late in the latter part of Nab. 885, (within a dozen days of its actual close), the first year of his successor is almost wholly hieratic. But for the last eleven days of the month, all of Antoninus Pius' first year of government was unreal for him, in that, in reality, it belonged to his predecessor. Nevertheless, in accordance with the iron-clad principle of Ptolemy's *Canon*, the Nabonassan year 885, because its consummation-day was included in the first eleven days of his government, is accounted the first "full" year of Antoninus Pius. It is so accredited to him, for instance, in the *Almagest* of Ptolemy, where his record of astronomical phenomena is continued. In this "first" year of Antoninus Pius, two planetary observations were made by the astronomer, but neither of them was actually executed in the emperor's first year of government: they were both anticipated in the Ptolemaean or Nabonassan fashion, when they were hieratically recorded thus:

1st year	Observ. on Jupiter	Athyr 20	Nab. 885	Oct. 8, 137 A.D.
1st year	Observ. on Mercury	Epiphi 20	Nab. 885	June 4, 138 A.D.

In like manner, all the canonical years of Pius, being Egyptian proleptic years, Nab. 885 to 907, apparently anticipate his actual matter-of-fact years, propounding events of the former in the numerical terms of the latter, seemingly over-dating what happened in the year before by giving them the seriation of the year later. Thus the second canonical year of this reign presents nearly throughout the events of the first matter-of-fact term. Witness again the astronomical findings of Nab. 886).

2nd year	Observ. on Venus	Tybi 29	Nab. 886	Dec. 16, 138 A.D.
2nd year	Observ. on Saturn	Mechir 6	Nab. 886	Dec. 22, 138 A.D.
2nd year	Second Dichotomy	Phamenoth 25	Nab. 886	Feb. 9, 139 A.D.
2nd year	Second Dichotomy	Pharmuthi 9	Nab. 886	Feb. 23, 139 A.D.
2nd year	Observ. on Mercury	Epiphi 2	Nab. 886	May 17, 139 A.D.
2nd year	Observ. on Mars	Epiphi 12	Nab. 886	May 27, 139 A.D.
2nd year	Observ. on Mars	Epiphi 15	Nab. 886	May 30, 139 A.D.
2nd year	Observ. on Mercury	Mesore 23	Nab. 886	July 8, 139 A.D.
2nd year	Observ. on Jupiter	Mesore 26	Nab. 886	July 11, 139 A.D.
2nd year	Autumnal Equinox	Athyr 9	Nab. 886	Sept. 26, 139 A.D.

In the same manner, the third proleptic year, Nab. 887, presents the events of the second defacto year.

3rd year	Vernal Equinox	Pachon 7	Nab. 887	Mar. 22, 140 A.D.
3rd year	Observ. on Venus	Pharmuthi 4	Nab. 887	Feb. 18, 140 A.D.
3rd year	Summer Solstice	Mesore 11	Nab. 887	June 25, 140 A.D.

In the superabundance of astronomical calculations here alluded to, we surely have all the confirmation and corroboration of the chronological position of Antoninus Pius' reign that could be reasonably desired, since all his twenty-three regnal years originate at the same extreme latter end of the canonical Nabonassan years accredited to him, on the tenth day of July, which Julian or Roman date may be uniformly located near the close of each vague Egyptian year. But fulsome and more than sufficient though it may be, "we have now," in the words of Dr. Jarvis, (*Chron. Intr.*, p. 388) "a collateral proof of the accuracy of this arrangement afforded us by Censorinus; for, writing in the year 238 of the Christian aera, [the consulship of Ulpian and Pontianus], he says that the first day of the Egyptian month Thoth, which that year was on the seventh before the kalends of July, or June twenty-fifth, fell on the twelfth [?] before the kalends of August, or July twenty-first [?], 'a hundred years ago, when the emperor Antoninus Pius, the second time, and Bruttius Praesens were consuls.'" According to this statement, the amount of time from one consulate to the other was exactly one hundred years, a sum precisely divisible by four, and thus equivalent to a total of twenty-five quadriennia (or four-year periods.) Like so many Olympiads, these one hundred years fitted neatly into

the frame-work of the twenty-five "year fours," and vice versa, so that the consulship of Ulpian and Pontianus was the one hundredth, and that of Antoninus II and Bruttian Praesens was the first of these one hundred years. The latter consulate could not fall before this (as the earlier-occurrence school of chronology demands), for the momentous event to be commemorated and immortalized by such a remarkable multitude of astronomical observations, the epochal end of the Canicular or Sothic Cycle, began in 139, not in 138 A. D. We say "began," because this "end" of the current Sothic Cycle of $[4 \times 365 =]$ 1460 years, only commenced in 139, and then continued throughout 140, 141, 142 A. D. To speak more appropriately, the "consummation" of the Sothic Cycle continued throughout the Nabonassan years 887, 888, 889, and 890. This four-year termination being not a thin, ethereal line of one day of twenty-four hours, but a broad belt of demarkation, the ample zone of which comprized a quadriennium or four-year period, it required just that many years to accomplish the lapse of one day, in 139—142 A. D. the nineteenth day of July. In like manner, the first of Thoth shifted *from* and *to* every day of the year. Beginning, therefore, in 139 A. D., to lapse on the nineteenth of July, it fell on that same date four times in succession, so that, when the first year of this quadriennium, Nab. 887, was spiked in its four corners by Ptolemy's observations of its autumnal equinox on September twenty-fifth, 139, the configuration of Venus on February eighteenth, 140, the vernal equinox on March twenty-second, 140, and the summer solstice on June twenty-fifth, 140 A. D., there was no possibility of shifting to any other year, forward or back. Nor was there a semblance of possibility left, when, in the fourth year of its consummation, the memory of this Sothic Cycle's "end" was perpetuated in still another and more practical way.

Not content with the lone astronomer's fourfold transfixion of the first year of the "end," the senate and people of Alexandria decreed that a memorial coin or souvenir medal should be struck in commemoration of this epochal event. Being stamped and issued in the *sixth* year of the emperor, it, at the same time, fixes both the location of this sixth regnal year by the final consummation of the Canicular quadriennium and the expiration of the Sothic Cycle by confining it to the fourth year of this four-year period. There can, consequently, be no debate as to which year, 139 or 138 A. D., was the first year of the Canicular quadriennium, nor which of the two was the first twelvemonth of the centennial interval between the consulship of Antoninus II and Bruttian Praesens and that of Ulpian and Pontianus, nor can there, therefore, be any question as to when, or in what year, Antoninus Pius administered the first year of his government *defacto*.

If, then, the first of the century of years enumerated by Censorinus was 139 A. D., and not 138 A. D., and this first-of-the-century year was the consulate of Antoninus II and Bruttius Praesens, then it follows, as a matter of course, that all the regnal years of Antoninus Pius as well as all the consular terms connected with them must be located as commonly accepted, unless otherwise determined. Accordingly the consulate of Camerinus and Niger, the same in which his predecessor died, was 138, not 137 A. D.; and the reign of Pius extended as commonly acknowledged, from July tenth, 138 A. D., to March sixth, 161 A. D.

It may be remarked, before proceeding, that the New Year's day of the Egyptian calendar did not coincide, in the second consulate of Antoninus, with the *twelfth* before the kalends of August or July twenty-first but with the *fourteenth*, or July nineteenth. For, since a hundred years contained only twenty-five, not twenty-seven quadriennia (or "year-fours"), it is evident that twenty-five lapses would carry the calendar back only twenty-five days, and [June 25 = 176] $176 + 25 = 201$; the next year over and above one hundred years would begin on the 201st day of the year (= July twentieth), while the last of the hundred years counted backwards began on July nineteenth. The first year, in the order of history, in which Thoth first could fall on July twenty-first (XII. Kal. Aug.) was 131 A. D., the last 134 A. D.; and the first in which the first of Thoth could coincide with July twentieth (XIII. Kal. Aug.) was 135 A. D., in which case the last time this could happen was the year 138 A. D. Censorinus therefore erred in regard to the day of coincidence, though not in respect to the consulship which he selected for his comparison. The consulship of Antoninus Pius II and Bruttius Praesens corresponded to the year J. P. 4852 or 139 A. D.

The first seven couplets of consular officials may be given in almost perfect harmony with ancient and modern authorities, except for the designation of the numbered consulates of the emperor, the lists of Cassiodorus, Victorius, Idatius, and the *Fasti Siculi* are almost perfectly alike. They are these:

<i>A.U.C.(Varro)</i>	<i>Ol.(Eus.)</i>	<i>Consuls.</i>	<i>Nab.</i>	<i>J.P. or A.D.</i>
889—891	229 ^a	Camerinus; Niger	885 ¹	4851 138
890—892	230 ¹	Antoninus Pius II; Bruttius Praesens II.	886 ²	4852 139
891—893	230 ²	Antoninus Pius III, M. Ael. Aurelius Verus	887 ³	4853 140
892—894	230 ³	M. Peducaeus Syloga; T. Hoenius Severus	888 ⁴	4854 141
893—895	230 ⁴	L. Cuspius Rufinus; L. Statius Quadratus	889 ⁵	4855 142
894—896	231 ¹	C. Bellicius Torquatus; Tib. Claud. Atticus Herodes	890 ⁶	4856 143
895—897	231 ²	P. Lollianus Avitus; C. Gavius Maximus	891 ⁷	4857 144
896—898	231 ³	Antoninus Pius IV; M. Aelius Aurelius II.	892 ⁸	4858 145

The subsequent consulship is variously given in the ancient lists—Gratus and Seleucus by Cassiodorus and Victorius; Clarus and Severus by Idatius; Severus V and Verinus by the *Chronicon Paschale*. There is evidently an error here. No such consuls as Gratus and Seleucus are elsewhere spoken of, but Clarus and Severus are located here by Spartian. He says (*Hist. Aug. SS.* p. 64, B) that the later emperor, Septimius Severus, "was born on the eighth of April, in the year *when Erucius Clarus, the second time, and Severus, were consuls.*" The same consuls are mentioned in a marble (*apud Gruter* p. 214) which bears the date: "On the first before the nones of May, which also was the eleventh day of Pachon according to the Alexandrians, *when Sextus Erucius Clarus and Cn. Claudius Severus were consuls.*" This date, as it is, limits the location of this consulate to the four years Nab. 891, 892, 893 and 894 or 143, 144, 145 and 146 A. D., during which alone the eleventh of Pachon could coincide with the eighth of April (the first of Thoth falling on the eighteenth of July four times in succession only in these years). The testimony of Dion Cassius, however, confines this consulate of Clarus and Severus to A. D. 145, as the sole possibility in this case. Speaking of Septimius Severus, Dion narrates that "he died on the fourth of February, and that he lived sixty-five years, nine months, and twenty-five days, having been born on the eleventh of April." Now, whether he was born on the eighth or eleventh of April, the consulship in which he was born was the sixty-sixth prior to the year of his death. For February fourth, 211 A. D. = 210 y., 1 m., 4 d.—65 y., 9 m., 25 d. = 144 y., 3 m., 10 d. = April tenth, 145 A. D.

We may, therefore, assume that, if the consulship in the course of which Septimius Severus was born, must be emplaced in the Julian year J. P. 4858 or 145 A. D., it must be harbored as a substitute or subordinate term of office, the regular title and superscription of which was "the consulate of Antoninus Pius IV and M. Aelius Aurelius II." The remaining consulates under Antoninus Pius were:

A. U. C. (Varro)	Ol. (Eus.)	Consuls.	Nab.	J. P. or A. D.
896—898	231 ³	Antoninus Pius IV; M. Aelius Aurelius II.	892 ⁸	4858 145
— — —	—	Sex. Erucius Clarus; Cn. Claudus Severus	—	—
897—899	231 ⁴	Antoninus Pius V; M. Aelius Aurelius III.	893 ⁹	4859 146
898—900	232 ¹	Largus; Messalinus	894 ¹⁰	4860 147
899—901	232 ²	Torquatus III; Julianus	895 ¹¹	4861 148
900—902	232 ³	Orfitus; Priscus	896 ¹²	4862 149
901—903	232 ⁴	Glabrio (Gallienus); Vetus	897 ¹³	4863 150
902—904	233 ¹	Condianus (Gordianus); Maximus	898 ¹⁴	4864 151
903—905	233 ²	Glabrio II; Homulus	899 ¹⁵	4865 152
904—906	233 ³	Bruttius Praesens [III?]; Junius Rufinus	900 ¹⁶	4866 153
905—907	233 ⁴	Commodus; Lateranus	901 ¹⁷	4867 154

<i>A.U.C. (Varro) Ol. (Eus.)</i>		<i>Consuls.</i>		<i>Nab. J.P. or A.D.</i>		
906—908	234 ¹	Severus;	Sabinianus	902 ¹⁸	4868	155
907—909	234 ²	Silvanus;	Augurinus	903 ¹⁹	4869	156
908—910	234 ³	Barbatus;	Regulus	904 ²⁰	4870	157
909—911	234 ⁴	Tertullus;	Sacerdos	905 ²¹	4871	158
910—912	235 ¹	Quintillus;	Priscus	906 ²²	4872	159
911—913	235 ²	App. Annii Atilius	Bradua; T. Clod.			
		Vibius Varus		907 ²³	4873	160
912—914	235 ³	Antoninus Pius VI; M. Ael. Aurelius				
		IV.		908	4874	161
		L. Aelius Verus II.				

In concluding our references to the *Astronomical Canon* of Ptolemy with the close of the reign of Antoninus Pius, checked at Nab. 907 as the twenty-third year of the emperor, we need only remark that, if the deciding element for the correct interpretation of this priceless norm of chronology had been, as avowed by some, the Egyptian New Year's day or Thoth first, then the first Thoth of Nab. 908, which Antoninus survived, would have demanded and dictated the addition of a twenty-fourth year to the reign of Pius in Ptolemy's *Canon*. But this calendric factor being in no way and never the criterion of Ptolemy's computation, the New Year's day of Nab. 908 is completely ignored. The last day of Nab. 907 was the day of judgment for Antoninus Pius. And having died, after a reign of approximately twenty-two and a half years (22y. 3m. 7d., according to St. Clement of Alexandria, or 22y. 7m. 6d., according to St. Theophilus of Antioch), on a sixth of March subsequent to the consummation-days of Nab. 907, we are convinced Antoninus closed his tenure of imperial government on the sixth of March, J. P. 4874 or 161 A. D., as required by the efficient key of the invaluable *Canon*, of which we now take leave.

"After the death of Pius," Julius Capitolinus tells us, in his *Life of Marcus Aurelius* (*Hist. Aug., Scriptores*, ed. Salmas, 1620, p. 25), that "Lucius Aurelius Verus Commodus became the partner of Marcus in the empire," and that "then, for the first time, the Roman empire began to have two Augusti," or, in other words, "two emperors." We take this to mean, not merely that L. Aurelius Verus, surnamed Commodus, became acting emperor at once, but also, and this is what we want to stress, that he, the father of the later emperor, Antoninus *Commodus*, was immediately created consul for the balance of the year. We gather this from a passage in Lampridius (*Hist. Aug.* SS. p. 45, B.) which declares that "*Commodus* [Jr.] was born . . . on the thirty-first day of August [*pridie Cal. Septemb.*] *patre patruoque coss.*" [when his father and his uncle were consuls]. It follows then that, if Commodus was born 31y. 4m. 0d. before the day of his death on December thirty-first, 192 A. D., he was born on the thirty-

first of August, J. P. 4874 or 161 A. D., when his father, Lucius Aurelius or Antoninus Verus Commodus, together with his uncle Marcus Aelius Aurelius, was acting consul for that latter part of the year.

It is at this point that the anachronistic school of chronology, represented by Dr. Samuel Farmar Jarvis, Mr. Wm. Page, Prof. Chas. A. L. Totten, and others, attempt to establish the necessity of inserting or, as they think of restoring, a full year's consulship between that of Antoninus Pius IV and M. Ael. Aurelius IV and that of the following year, Rusticus and Aquilinus. It is of such tremendous importance because of the tremendous amount of confusion introduced into the realm of chronology by this pseudo-scientific innovation. The contention of this sadly misguided group of men is this, Dr. Jarvis asserting in his book (*Chron. Introd.*, p. 285-6):

"The next two consulships... according to Cassiodorus, were, A. D. 161, the two Augusti; and A. D. 160, Antoninus V. and Aurelius III. Victorius, beside the two Augusti, has inserted the consulship of Antoninus and Aurelius twice. Idatius has confounded the two consulships of the two Augusti and Antoninus and Aurelius, blending them into one: 'Antonino V. et Aurelio Caes. duobus Augustis.' The *Chronicon Paschale*, on the other hand, distinguishes the two consulships, but confounds the persons, omitting the name of Antoninus, and supposing both to have been borne by Marcus Aurelius the philosopher, and his colleague Lucius Verus: 'A. D. 161 Marco Aurelio Vero et Lucio Commodo Augusto III. A. D. 160 Marco Aurelio Vero et Lucio Commodo Augusto II.' The modern critics, having mistaken the year of Julius Caesar's war in Spain, and placed that war one year later than it ought to be, have been obliged to omit one of these consulships. They have therefore neglected the testimony of Cassiodorus, and by comparing Idatius with the *Chronicon Paschale*, have thought to correct both by representing thus the consulship of A. D. 161: M. Aur. Verus Antoninus Caes. III. dictus Philosophus. L. Aelius Aur. Verus Caes. II. dictus etiam Commodus. They have therefore suppressed entirely the consulship of A. D. 160 Antoninus Pius Imp. Aug. V. and M. Aelius Aurelius Caesar III., which are correctly stated by Cassiodorus.

"This important suppression, by which the whole consular chronology for more than two hundred years, from the time of Julius Caesar to the end of the reign of Antoninus Pius, has been thrown into disorder, will be more clearly illustrated" etc.

To set matters right, and to clear up the cause of the well-nigh interminable confusion created by this unfortunate misimprovement and mal-correction of chronology, let us, first of all, endeavor to get the names and surnames of these various persons

right, who come into serious consideration here. That Lucius Aelius Verus, surnamed Commodus, who rose to the rank of consul and emperor in Antoninus Pius' place, as well as Marcus Aurelius, called the philosopher, bore the name of "*Antoninus*," is attested by a passage in Spartian's *Life of Aelius Verus*, the father of the associate emperor Lucius Antoninus Verus Commodus: Spartian's testimony is this: "His son was that *Antoninus Verus* who was adopted by Marcus. Verus certainly had an equal share with Marcus in the government of the empire. *For these are they who first were called the Two Augusti, and whose names are so enregistered in the consular fasti, that they are called not merely the two Antonini but the two Augusti.*" Here Lucius Aelius Verus is expressly invested with the name "*Antoninus*" as well as with the title "*Augustus*," making it appreciably possible for the compilers of the consular fasti to confound not only the personalities involved in this mix-up, but their portfolios as well. And that Lucius Aelius Verus advanced to the dignity and authority of acting consul in the same twelvemonth in which his predecessor in both offices, the imperial and the consular, died, has already been pointed out in the testimony of Lampridius to the effect that this same Commodus' son Commodus was "born on the thirty-first day of August," at precisely the time "*when his father and his uncle were consuls.*" As the father of Titus, Vespasian Senior, was subordinate, but acting consul when Titus, Vespasian Junior, was born, so, Lampridius implies, the father of Commodus Junior, Lucius Aelius Antoninus, surnamed Commodus, was subordinate, but acting consul when Commodus Junior was born. "What consulship could this be, but that of the two Augusti, M. Aurelius Antoninus IV. and L. Aurelius [Antoninus] Verus II. A. J. P. 4874, A. D. 161?—when Rome for the first time saw two equal partners of empire, both holding at the same time the consular dignity?" (Jarvis, *Chron. Intr.*, p. 330) It is, therefore, clear as crystal that there is no need nor necessity here for inserting another consular term to provide accommodation for the events of the day. If anything, there is an absolute writ of prohibition here against attempting to interpolate a consulship where no additional office is required. The commonly accepted chronology is good enough here as it is.

The list of consulships under the joint-emperorship of Marcus Aurelius Antoninus Augustus and Lucius Aurelius Antoninus Augustus may be registered as follows:

A. U. C. (Varro)	Ol. (Eus.)	Consuls.	Nab.	J. P. or A. D.
912—914	235 ³	Antoninus Pius VI; M. Aelius Aurelius IV.	908	4874 161
		L. Ael. Antoninus Verus II.		
913—915	235 ⁴	Rusticus; Aquilinus	909	4875 162

<i>A.U.C. (Varro) Ol. (Eus.)</i>	<i>Consuls.</i>	<i>Nab.</i>	<i>J.P. or A.D.</i>
914—916 236 ¹	L. Aelianus; Pastor	910	4876 163
915—917 236 ²	Macrinus; Celsus	911	4877 164
916—918 236 ³	Orfitus; Pudens	912	4878 165
917—919 236 ⁴	Servilius Pudens; Pollio	913	4879 166
918—920 237 ¹	L. Aurelius Verus III; Quadratus	914	4880 167
919—921 237 ²	Apronianus; Paulus	915	4881 168
920—922 237 ³	Priscus; Apollinaris	916	4882 169
921—923 237 ⁴	Cethegus; Clarus	917	4883 170
922—924 238 ¹	Severus; Herennianus	918	4884 171
923—925 238 ²	Orfitus; Maximus	919	4885 172
924—926 238 ³	Severus II; Pompeianus	920	4886 173
925—927 238 ⁴	Gallus; Flaccus	921	4887 174
926—928 239 ¹	Piso; Julianus	922	4888 175
927—929 239 ²	Pollio; Aper	923	4889 176
928—930 239 ³	Commodus ; Quinctillus	924	4890 177
929—931 239 ⁴	Orfitus; Rufus	925	4891 178
930—932 240 ¹	Commodus II ; Verus II.	926	4892 179

As to the length of this reign of Antoninus Pius, (there being only a difference of one day in the statements of St. Theophilus of Antioch, St. Clement of Alexandria, and Dion Cassius, or Xiphilinus), we are tempted to express our agreement with them that nineteen years, eleven days is correct. But Eutropius and Julius Capitolinus affirm that Marcus Aurelius died in the *eighteenth* year of his reign, which seems to have also been the opinion of Eusebius, who places the accession of Commodus jr. in the fourth year of the 239th Olympiad, according to the system observed by him, in 179 A. D. When, therefore, in addition to these testimonies, we take into consideration that Xiphilinus states on Dio's authority that Marcus Aurelius lived fifty-eight years, ten months, and twenty-two days, or, in other words, almost to the end of his fifty-ninth year, it appears decidedly more probable that this emperor died in 179, than in 180 A. D. For if he was born "on the twenty-sixth of April, (vi. kal. Maias), when Annus Verus II. and Augur were consuls," i.e. in 120 A. D., the fifty-ninth year of his life expired in 179 A. D., not in 180. There can hardly be a doubt, then, but a positive certainty, that the imperial philosopher died in J. P. 4892 or 179 A. D., rather than a year later, even though we run into a host of contradictions in regard to the following reign.

The successor and son of Marcus Aurelius, Antoninus Commodus, is said by Dion Cassius (B. lxxii. 1) to have entered upon his rule, on his father's death, at the age of *nineteen* years. But here, as Dr. Jarvis justly observes, "there is an evident mistake of one year. If Marcus Aurelius died on March seventeenth, J. P. 4892 or 179 A. D., and Commodus Junior was born on August thirty-first, J. P. 4874 or 161 A. D., the time before his birth (being the time of his youth spent under the rule of his father's co-regency with Marcus Aurelius) taken from the aggre-

gate of time at his father's death, will show his age exactly. J. P. 4891—4873=17; or A. D. 178y. 2m. 17d.—160y. 7m. 30d.=17y. 6m. 17d. He was, therefore, in his *eighteenth*, not in his nineteenth year, when he acceded to the government on the death of his father.

The reason for this discrepancy in his age is the curtailment of his reign by all the old chronologers, who have followed in the footsteps of Dion Cassius. Thus Eutropius makes its length 12y. 8m.; St. Clement of Alexandria 12y. 9m. 14d., while Aurelius Victor and Cassiodorus compute it roundly at thirteen years, and the *Chronicon Paschale* at twelve years only. But the consular lists demonstrate that Commodus must have ruled *Thirteen* full years and a fraction. The consulships were these:—

<i>A.U.C.(Varro) Ol.(Eus.)</i>		<i>Consuls.</i>	<i>Nab. J.P. or A. D.</i>		
930—932	240 ¹	Commodus II; Verus II	926	4892	179
931—933	240 ²	Bruttius Praesens II; Quintilius Condianus	927	4893	180
932—934	240 ³	Commodus III; Byrrhus	928	4894	181
933—935	240 ⁴	Mamertinus; Rufus	929	4895	182
934—936	241 ¹	Commodus IV; Victorinus	930	4896	183
935—937	241 ²	Marullus; Aelianus	931	4897	184
936—938	241 ³	Maternus; Bradua	932	4898	185
937—939	241 ⁴	Commodus V; Glabrio	933	4899	186
938—940	242 ¹	Crispinus; Aelianus	934	4900	187
939—941	242 ²	Fuscianus; Silanus	935	4901	188
940—942	242 ³	Junius Silanus; Servilius Silanus	936	4902	189
941—943	242 ⁴	Commodus VI; Septimianus	937	4903	190
942—944	243 ¹	Apronianus; Bradua	938	4904	191
943—945	243 ²	Commodus VII; Pertinax	939	4905	192

“If, then,” in the words of Dr. Jarvis (*Chron. Intr.*, p. 331), “we add the length of his reign, as obtained by this list, 13y. 9m. 13d., to the age attained at the time of his father's death, 17y. 6m. 17d., it gives precisely the length of life stated by Dion, 31y. 4m. 0d.”

The reign of Commodus, thus fixed authoritatively by the historian, is still further authenticated by a coin of his rule struck in the last quarter of the year J. P. 4905 or 192 A. D., commemorating the 216th year of the founding of Sebaste in Syria, viz. Samaria. This Samaritan city of “Sebaste”=“Augusta” had been settled by Herod, the ardent admirer of Augustus, in the thirteenth year of his reign, which coincided with the last quarter of J. P. 4690 or 24 B. C. and three quarters of J. P. 4691 or 23 B. C. It was therefore beyond all cavil the 216th year of its existence as a municipality when Commodus was slain on the thirty-first of December, 192 A. D.

Perhaps because the reign of Commodus conterminated so evenly with the close of the civil year, this date is also employed by Clement of Alexandria as a pivot in his computation of the

time from the birth and death of Jesus down to the days of his own activity. Now, although St. Clemens computes 128 years, ten months, three days from the destruction of Jerusalem, forty-two years, three months more from the Crucifixion, and 194 years, one month and thirteen days from the Nativity of Jesus—all to the death of Commodus, and all of them erroneously,—nevertheless the impression left by this general termination of his calculations is this, that we have at last reached a base commonly accepted by all schools and classes of chronology.

Acknowledging the fact most gratefully, we shall forthwith show our gratitude by abridging and abbreviating as drastically as possible what remains to be said of the consular terms and imperial reigns extending to the epochal date of Censorinus.

As the following two emperors, Publius Helvius Pertinax and Didius Julianus, were killed in the course of the same year, J. P. 4906 or 193 A. D., their combined reigns of eighty-seven days (from the first of January to the twenty-eighth of March), and sixty-six days (from the twenty-eighth of March to the first of June), respectively, may be dismissed with the score of a single consulate, that of Q. Sossius Falco and C. Erucius Clarus, J. P. 4906 or 193 A. D. The consuls co-ordinated in the succeeding reign of Septimius Severus are these:

<i>A. U.C. (Varro) Ol. (Eus.)</i>	<i>Consuls.</i>	<i>Nab. J.P. or A.D.</i>		
944—946 243 ³	Q. Sossius Falco; C. Erucius Clarus	940	4906	193
945—947 243 ⁴	Septimius Severus II; Albinus	941	4907	194
946—948 244 ¹	Tertullus; Clemens	942	4908	195
947—949 244 ²	Dexter; Priscus	943	4909	196
948—950 244 ³	Lateranus; Rufinus	944	4910	197
949—951 244 ⁴	Saturninus; Gallus	945	4911	198
950—952 245 ¹	Annulinus; Fronto	946	4912	199
951—953 245 ²	Septimius Severus III; Victorinus	947	4913	200
952—954 245 ³	Mucianus; Fabianus	948	4914	201
953—955 245 ⁴	Septimius Severus IV; Antoninus	949	4915	202
954—956 246 ¹	Plautianus II; Geta	950	4916	203
955—957 246 ²	Cilo; Libo	951	4917	204
956—958 246 ³	Antoninus II; Geta II.	952	4918	205
957—959 246 ⁴	Albinus; Aemilianus	953	4919	206
958—960 247 ¹	Aper; Maximus	954	4920	207
959—961 247 ²	Antoninus III; Geta III.	955	4921	208
960—962 247 ³	Pompeianus; Avitus	956	4922	209
961—963 247 ⁴	Faustinus; Rufinus	957	4923	210
962—964 248 ¹	Gentianus; Bassus	958	4924	211

For approximately six years, according to Aurelius Victor, or, more precisely, for six years and two months, according to Eutropius, or six years, two months, two days, according to Dion Cassius, Aurelius Antoninus Bassianus, surnamed Caracalla, held the reins of government. He was slain by the arts of Macrinus, the praelect of the Praetorian guards, on his birthday,

the sixth of April, during or after the Megalesian games. The seven sets of consuls connected with this emperor's reign may account for the duration of seven years ascribed to it by Cassiodorus and the *Chronicon Paschale*, and of not fully seven years, by Orosius. The consuls were:—

A.U.C.(Varro)	Ol.(Eus.)	Consuls.	Nab.	J.P.	or A.D.
962—964	248 ¹	Gentianus; Bassus	958	4924	211
963—965	248 ²	Asper; Asper	959	4925	212
964—966	248 ³	Antoninus Imp. IV; Balbinus	960	4926	213
965—967	248 ⁴	Messala; Sabinus	961	4927	214
966—968	249 ¹	Laetus; Caerealis	962	4928	215
967—969	249 ²	C. Atius Sabinus II; Cornelius Anulinus	963	4929	216
968—970	249 ³	Bruttius Praesens; Messius Extricatus	964	4930	217

The usurper, Opilius Macrinus, having possessed himself of the government for one solid twelve-month according to Cassiodorus and the *Chronicon Paschale*, or for fourteen full months according to Eutropius and Aurelius Victor, but, according to Dion Cassius, for one year and two months wanting three days, was evidently slain, as Lampridius puts it (*Hist. Aug.* ss. p. 100A), "in the fourteenth month of his government." His reign, therefore, impinges on two consulates only, the following:

A.U.C.(Varro)	Ol.(Eus.)	Consuls.	Nab.	J.P.	or A.D.
968—970	249 ³	C. Bruttius Praesens; T. Messius Extricatus	964	4930	217
969—971	249 ⁴	Antoninus; Adventus	965	4931	218

The successor in the imperial majesty, no less a usurper than Macrinus, and constantly called an inpostor by Dion Cassius, Varius, or M. Antoninus, Heliogabalus, ruled the Roman world approximately four years according to Cassiodorus and the *Chronicon Paschale*, or, according to Dion Cassius, precisely three years, nine months, and four days. The computation by consular terms confirms these non-conflicting statements.

The affairs of Heliogabalus being of vast importance to the Orientals of Asia Minor and western Asia in general, the period of his ascendancy, or rather the acme of his tyranny "for nearly three years" (*prope triennio*), is internationally memorialized by a series of coins issued by the citizens of Tripoli in the years of the Seleucic era 531, 532, and 533. Since the date of his death, if incorporated in the last of these years, can correspond only to March eleventh, 222 A. D., it is certain that it was then that Heliogabalus departed this life.

A.U.C.(Varro)	Olymp.	Consuls.	Nab.	J.P.	or A.D.
969—971	249 ²	Antoninus; Adventus	965	4931	218
970—972	249 ³	M. Antoninus Heliogabalus; Sacerdos	966	4932	219
971—973	249 ⁴	M. Antoninus Heliogabalus II; Comazon	967	4933	220
972—974	250 ¹	Gratus Sabinianus; Seleucus	968	4934	221
973—975	250 ²	M. Antoninus Elagabalus III; M. Aur. Severus Alex.	969	4935	222

The same certainty of location applies to the accession to the throne of his successor, his cousin, M. Aurelius Alexander Severus. In regard to the year of accession of this virtuous prince we have a magnificent specimen of monumental evidence in the statue of St. Hippolytus, the author of the Paschal Cycle which bears his name. In the caption of the calendar cycle engraved on the sides of his chair, the date of the beginning of his Cycle is inscribed. It is there stated, as Dr. Jarvis has it (*Chron. Introd.*, pp. 339-340), that "in the first year of the reign of the emperor Alexander, the fourteenth day of the paschal moon fell on Saturday, the thirteenth day of April. Now this is found by computation to have happened in that year. The lunar cycle was fourteen; the solar, seven; and the Sunday letter F."

But there are discrepancies and incongruities in the monumental inscription as well as in the doctor's comments upon it which cannot be passed up without challenge. In the first place, the *Paschal Canon* itself does not begin with the Sunday letter F, as required by the doctor's identification, but with the letter G. In the second place, the notation SS., "translated Biss, because it denotes that it was a bissextile or leap year," proves, indeed, "that the third year of the cycle [and the third year of the reign of Alexander] or A. D. 224, was a leap year," but it does not "furnish us with a clue, by which we can reckon the leap years, back to the reformation of the calendar. We have found that the year of the Julian Period 4669, the first of Caesar's calendar, was *not*, as implied, a leap year; and we have learned from the variations of the Olympiads and the Roman years A. U. C. that "twixt cup and the lip there's many a slip." In the third place, a consistent interpretation of the Cycle's annotations will demonstrate that, in the superscription itself, is an error possibly caused by a would-be correction of the date. While the first year of the Cycle obviously coincides with the first year of Alexander Severus, the last or sixteenth year, reverting, after twelve revolutions of the Cycle, ostensibly to the consulate of the two Gemini, Fufius and Rubellius, is said to correspond to the year almost universally assigned by the Church Fathers to the "Passion of Christ." Without wishing to stress the point of evidence which this *Canon* bears in favor of the alleged Crucifixion date, we desire only to call attention to the fact that, "in the sixteenth line, where the paschal full moon is stated to be on the eighth before the kalends of April, or March twenty-fifth, the same order of the letters occurs as in the first line, when the paschal full moon fell upon the ides of April. If then the letter Z in the Greek, or G in the translation, denoted Saturday, . . . S in the Greek table, or F in the translation, must denote Friday. If this inference be just, Hippolytus has noted that the passion of our Saviour took place

on Friday, the eighth before the kalends of April, or March the twenty-fifth." The exception taken is this.

If the twenty-fifth of March connoted "Passion of Christ," in the sixteenth year of this Cycle, corresponding to A. D. 237 *Letter A*, was a Friday, then the thirteenth of April, 222 A. D., in the first year of the Cycle must have been a Friday and the fourteenth of Nisan *Letter G*, or the Sabbath mentioned must have been the Passover Sabbath, Nisan fifteenth and April thirteenth, 222 A. D. *Letter F*. For whether we express the number of days from the fourteenth of Nisan and thirteenth of April in 222 A. D. to the fourteenth of Nisan and twenty-fifth of March in 237 A. D., in terms of the lunar or solar calendar, it is equally 5460 days, or 780 solid weeks. Consequently, if the thirteenth of April in 222 A. D. was a Saturday [Letter F], the twenty-fifth of March 222 237 A. D. was a Saturday [Letter A], dating the "Passion of Christ" on a Sabbath, contrary to the belief of the whole Catholic Church and all Christian Church fathers. But if the testimony of evangelists and church fathers is true, and is attested by this monument of St. Hippolyte, that the "Passion of Christ" occurred on a Friday, and that the twenty-fifth of March, in the Crucifixion year, was a Friday, then either the *fourteenth of Nisan* corresponded to the TWELFTH of April, 222 A. D. (Letter F) or it was the FIFTEENTH of Nisan that coincided with SATURDAY, the thirteenth of April, 222 A. D. (Letter F); or, if not either of these alternatives, the first year of the reign of Alexander should be marked in harmony with the first year of the Cycle with the dominical letter G.

Content, for the present, with the facts ascertained, that the Paschal Cycle of St. Hippolyte was made to commence in the first year of Alexander Severus, J. P. 4935 or 222 A. D., and that this was exactly 192 years, or twelve complete revolutions of the Cycle after the consulate of the two Gemini, who are thus confirmed in their emplacement, we note, in passing, the coincidence of the Cycles' *sixteen* years with the thirteen of Alexander and the three of the Maximini, and the still more delectable accident that this first revolution of St. Hippolyte's *Canon* conveys us to the very door-step of the year which constitutes the exit of our chronological inquiries. There remains, therefore, only to see how the consulships of this closing period comport with the reigns of the emperors mentioned. The consulships belonging to the reign of Alexander were these:—

<i>A.U.C. (Varro) Olymp.</i>		<i>Consuls.</i>	<i>Nab. J.P. or A.D.</i>		
973—975	250 ²	Antoninus Elagabalus III; Alex. Severus Maximus II; Aelianus Julianus; Crispinus Fuscus; Dexter	969	4935	222
974—976	250 ³		970	4936	223
975—977	250 ⁴		971	4937	224
976—978	251 ¹		972	4938	225

<i>A.U.C.(Varro)</i>	<i>Olymp.</i>	<i>Consuls.</i>	<i>Nab. J.P. or A.D.</i>		
977—979	251 ²	M. Aur. Sev. Alexander II; Marcellus Quinctilianus	973	4939	226
978—980	251 ³	Albinus; Maximus	974	4940	227
979—981	251 ⁴	Modestus; Probus	975	4941	228
980—982	252 ¹	M. Aur. Sev. Alexander III; Dion Cassius II.	976	4942	229
981—983	252 ²	Agricola; Sex. Catius Clementinus	977	4943	230
982—984	252 ³	Pompeianus; Pelignianus	978	4944	231
983—985	252 ⁴	Lupus; Maximus	979	4945	232
984—986	253 ¹	Maximus; Paternus	980	4946	233
985—987	253 ²	Maximus II; Urbanus	981	4947	234
986—988	253 ³	Severus; Quinctianus	982	4948	235
		<i>Consuls under the Maximini.</i>			
987—989	253 ⁴	C. Julius Maximinus; Jul. Africanus	983	4949	236
988—990	254 ¹	Perpetuus; Cornelianus	984	4950	237
989—991	254 ²	M. Ulpius Crinitus; Proculus Pontianus	985	4951	238
			986		

VOLUME II. CHAPTER II

THE YEARS OF THE SELEUCIDAE

With the conclusion of the Roman consular lists in connection with the Greek Olympiads and the Egyptian years of the Nabonassan Era and Ptolemy's *Astronomical Canon*, we have arrived at what would seem the ne plus ultra of chronological completeness and consummation. Yet it is a mistake to imagine that we have reached actual finality. On the contrary. If, in lieu of the Philipptic Years mentioned by Censorinus in his great crystalization of all important eras, we substitute the years of the Seleucidae, or, as it is termed in 1 Macc. I, 10, "the years of the kingdom of the Greeks," we obtain another tremendously telling piece of chronological ordnance, which, if rightly used, will open up to us hitherto unsuspected riches of exact chronological knowledge. As an indication of its superior popularity and its predominant employment as a sound, consistent, and therefore thoroughly dependable measure of time, the fact may be cited in the words of an old-time chronologist, Sir H. Nicolas (*Chron. of Hist.*, p. 178), that, "until the fifteenth century, the Jews usually computed their time by the Era of the Seleucidae." "This era," he further declares (on pp. 10-11 of the same volume), "prevailed, not only in the dominions of Seleucus, but among almost all the people of the Levant, where it is still in use. Considerable variation, however, existed respecting the commencement of the years. The Greeks of Syria began it on the first of September, and other Syrians in the month of October [October first]. The Jews, after they became subject to the kings of Syria, likewise adopted this era; and did not abandon it for the one now used by them until within the last four hundred years. By the Arabs it is still used." In practically the same words, the same facts are vouched for by the *Encyclopedia Britannica*. "The era of the Seleucidae, dating from the time of the occupation of Babylon by Seleucus Nicator. . . . was adopted not only in the monarchy of the Seleucidae, but in general in all the Greek countries bordering on the Levant, was followed by the Jews till the fifteenth century, and is said to be used by some Arabians even at the present day." It is apparent from these generally accredited facts that, for hundreds and hundreds of years, millions and millions of people pinned their faith on this widely prevailing system of chronology, believing it themselves and letting it be known to others that this mode of keeping time was

one of the foremost, most reliable and venerable of the major systems of timekeeping known to man.

The fact of its popularity, thus attested, we may say, is founded on the basic fact of its great dependability. It was so popular because it was so dependable. Since the application of this measure of time extended through so many centuries, through so many countries and through so many crises of history, it is evident that we should be able to amass mountains of testimony in favor of its soundness and consistency or else in depreciation of its value and its validity, from the descriptions or the traditions of the people among whom this system prevailed. And since, also, a great variety of nations is interested in the final limitation of the life-time of Jesus or else in the final stabilization of Easter, as well as the settlement of various ancient dates by means of this time-honored instrument of time reckoning, it will be interesting, too, to note how diversified is the testimony in behalf of the solidarity and sound consistency of this international, cosmopolitan era. We may prosecute our inquiry concerning its soundness in its relation, first, to Mohammedan affairs, then to Christian Church affairs, then to Roman government affairs, and finally to Jewish national church and state affairs, as we proceed, in four distinct stages, through the history of its evolution.

In the first place, relating to the affairs of the Mohammedan world, we may cite the trenchant testimony of Ulug Beg, the celebrated Arabian writer (see Clinton's *Fasti Hellenici*, Vol. III, p. 367-8), who computes that the era of the Seleucidae "was twelve years after the death of Alexander, 340,700 days before the Hegira of Mahomet, and 344324 days before the Persian era of Yezdegird." It will be observed at once that the Arabian author reduces his calculation to a small-town problem in elementary school arithmetic. He places it within the grasp of an ordinary school-boy. Yet we are thankful for this very thing, for, combining simplicity with depth of penetration, it demonstrates conclusively that, 340,778 days being equal to 933 Julian years (that is to say, 933 common years of 365 days each, plus 233 leap year days), there could be no more than 933 years in the Era at the time of the Hegira, nor any less than 933 years (current) on July fifteenth, 622 A. D.; for $933 - 621\frac{1}{2} = 311\frac{1}{2}$ or 312 B. C. In other words, deducting the difference of seventy-eight days from July fifteenth, we obtain Oct. 1, 312 B. C., for the day when the era of the Seleucidae really began.

Deducting the 195 days which elapsed in 622 A. D. *before* the Hegira occurred, and the 233 days which served as leap-year days during the evolution of the Era, we have 340272 days to be divided up into ordinary Julian years. $340272 \div 365 = 932$ yrs.

92 days. Overlapping the rear end of 312 B. C., the remaining ninety-two days, equivalent to the thirty-one days of December, the thirty days of November, and the thirty-one days of October, complete the computation of the Seleucic Era by landing us on the first of October, 312 B. C., as the beginning of the Era.

It is true there are variations as to days in similar detailed computations, owing to the earlier or later application of the Era under Seleucidic rule, some, like Albategni, reckoning from September first; others, for inst. the people of Tyre, from October nineteenth; others, citizens of Gaza, from the twenty-eighth of the same month, and still others, denizens of Damascus, even from the vernal equinox, but none of them of so large a difference as to carry the commencement of the annual count beyond the limits of 312 B. C. It is a significant fact that, whatever other systems of chronology may have experienced an expansion or contraction of time-reckoning, such as the Greek Olympiads, or the years from the foundation of Rome, or the Hebrews' Cycle of Sabbatic Years, or any other era, this Era of the Seleucidae has, by the kindness of Providence or the chance of good fortune, experienced none of these fluctuations and aberrations from the truth. It may be claimed that the so-called Era of Contracts was such a variation of the Seleucic Era, being introduced a year later and employed in every-day life by the Chaldeans [whoever they were, at this period of the world's history]; but the truth is, the Era of the Seleucidae was really never diminished or reduced a whole year, as has been said of the Chaldaic Era of Contracts, nor was it ever augmented or enlarged a whole year, as has been claimed by Prof. Totten (*Our Race*, No. 13, pp. 32-35). It was so well established in fact that, for instance, the all-important 148th year of the era could not, according to one variation, be compared with 166 B. C., according to another with 164 B. C. Its 148th year was anchored for good in the Julian year J. P. 4549 or 165 B. C. And it is there to stay for all time and eternity, because every known and conceivable computation goes to show that it has maintained a uniform seriation in point of numerical order, a consecutiveness of unimpeachable sequence, which was unmarred by a single addition or duplication and left undisfigured by any lapse or suppression, either involuntary or deliberate.

Another Arabian writer, Albategni, who reported his observation of the autumnal equinox in the 1206th year from the death of Alexander or in the 1194th year of Dylkarnaim [scil. of the Seleucidae], "*die 19^o mensis Elul, Pachon 8^o 4h 45m ante ortum diei, sive 1h 15m a media nocte,*" agrees with Ulug Beg [and Abulpharagius] as to the year, but not as to the month or day of its beginning. The demonstration of his theorem is conducted

thus by Fynes Clinton (*F. H.* Vol. III, p. 369): "This observation was taken 743 Egyptian years, 178 days, 17h. 36m. after the observation made by Ptolemy on the ninth of Athyr, an hour after sunrise, in the 463rd year after Alexander. That observation of Ptolemy was taken September twenty-sixth, A. D. 139. But 743 Egyptian years 178d. 17h. 36m. are equal to 743 Julian years 357d. 23h. 36m., which will bring down the observation of the Arabian astronomer to September nineteenth A. D. 882, U. C. 1635 [Varro]. But if in September nineteenth A. D. 882 or U. C. 1635 [Varro.] the 1194th year of Dylkarnaim or of the Seleucidae had commenced, the first year [of the Seleucid Era] must have commenced in September B. C. 312 or U. C. 442 [Varro]. Albategni therefore appears to reckon this era one month earlier than the true beginning, which is determined by Ulug Beg to October first."

Now it is true this divergence of a month in the way of beginning the ancient Syro-Macedonian year may actually have obtained to the extent and in the proportion in which it was begun either with Hyperberetaeus [September] or with Dius [October], but, however that may be, with the exception of the Chaldeans (a sect of Christians in Palestine now dwindled down to the smallest of nationalities, numbering about 2,000,000 souls), we shall not meet with any nation of any importance who began the count of its serial years from any other point than J. P. 4402 or 312 B. C. This, at least, was the universal view of the Mohammedan nationalities in Arabia and other parts of the Orient.

In relation to affairs of the Christian Church, Norisius, demonstrates from two distinguished testimonies that the Council of Nice in June A. D. 325 or A. U. C. 1078 was in the 636th year of the Seleucidae. "And this agrees," says Clinton (*F. H.*, Vol. III, p. 368), "with the commencement of the era in U. C. 442 [or 312 B. C.]: for $442+635=1077$, and the 636th year began in autumn U. C. 1077 [or 324 A. D.], nine months before the Council." Hence, although the Council of Nice did not, in so many words, declare its faith in the Era of the Seleucidae as a standard of time-determination, it availed itself for a popular and ostensibly trustworthy mode of defining a date for the benefit of posterity.

In the same way, but relying collaterally on the list of Roman consuls instead of the year from the foundation of Rome, the Christian people of the second century of the era A. D. recorded the date of a council assembled at Rome to deal with questions concerning the story of the infancy of Jesus in Matthew's Gospel in terms of the Seleucid era. This church council met, it is said (see Bacon's *Fourth Gospel*, p. 220), "in the year 430 (Seleucid era = 119 A. D.) under the reign of Hadrianus Caesar, in the consul-

ship of Severus and Fulgus and the episcopate of Xystus, bishop of the city of Rome." The consulship thus signalized as a correlative of the 430th year of the Seleucic Era was, as we have seen, the third consular term under Hadrianus Caesar (119 A. D.), and the sixth consular term before that of Verus III and Ambibulus in 125 A. D., which highly distinguished consulship is indissolubly tied up with the ninth year of Adrian, Nab. 872, not only by the scientific record of a lunar eclipse, but by the documental certificate relating to the birth of Pertinax, the later emperor. Accordingly in agreement with the data here presented, the era of the Seleucidae began its course in 312 B. C.; for $430 - 118\frac{1}{2} = 311\frac{1}{2}$ or 312 B. C. If the faith of the people of the second Christian century does not, in itself, prove the correctness and upright character of the Seleucic Era, its employment nevertheless does attest their full confidence in the propriety of its use as a truthful and trustworthy determinant of time.

As we revert to the years of the Seleucic Era, in the third stage of its historic development, which relate to the regnal years of the Roman emperors, we find before very long that the list of Seleucic references to reigns of the emperors up to the time of Censorinus in 238 A. D., is entirely too extensive to be expatiated on by us, especially since the greater bulk of this period, Sel. 283 to 550, does not properly fall within the scope of our dissertation (Sel. 148 to 381). We shall, therefore, reduce the number of references (selected only for the purpose of confirming and corroborating our system of chronology) to only six or seven. They are, in reverse to historical order, the following:

1. An inscription of Palmyra, communicated by Norisius (p. 123) and reproduced by Clinton (*F. H.*, Vol. III, p. 370 note ^b), mentions the 547th year of the Seleucidae. Commencing in the autumn of A. D. 235, the 547th year of this era locates the death of Alexander Severus and the accession of Maximinus, in the third year before Censorinus composed his famous symposium of chronological data. But if these events of historical significance are properly emplaced in 235 A. D., so as to correspond with the $(550 - 3 =)$ 547th year of the Seleucic Era, then the series of 547 years began $(547 - 235 =)$ 312 B. C.

2. Three coins of the emperor Elagabalus, issued by the city of Tripoli in Asia Minor, in the years 531, 532, and 533 of the Seleucic Era, contribute their mead of numismatic evidence to the same effect, that the Era of the Seleucidae began its career in J. P. 4402 or 312 B. C. For, as Clinton, (*F. H.*, Vol. III, p. 368) puts it, "as Elagabalus was slain in March towards the close of U. C. 974 [Varro], and as the 533rd year had begun before March [A. D. 222 or] U. C. 974, the first must have begun before March [311 B. C. or] U. C. 442. But, as we have seen [or shall see] in the

coin of Hadrian that the first year commenced after August eleventh, [312 B. C. or] U. C. 442, and this coin of Elagabalus demonstrates that it commenced before March, B. C. 311 (the close of U. C. 442), we obtain the autumn of that year of the city for the beginning of the epoch."

3. Another numismatic testimonial anent the seriation of the Seleucic Era is added to the mass by a coin of Caracalla. It is thus inscribed: "Εμισων κολωνίας ηχφ. anno 528" (see Norisius p. 73 and p. 96, 102), and is thus elucidated by Clinton (*F. H.*, Vol. III, p. 368): "Caracalla was slain April eighth, A. D. 217 at the close of U. C. 969 [Varro]. But, if the 528th year was still current April eighth, U. C. 969 [Varro], the first year had not yet ended April eighth U. C. 442 [Varro], because $442 + 528 = 970$ would carry the date below the death of Caracalla. The first year therefore began in autumn U. C. 442 [Varro] and the 528th year [of the Seleucidae] began in autumn U. C. 969 [Varro], six months before the death of Caracalla."

4. Another coin of Antoninus Pius [see Norisius p. 100; Clinton, *F. H.*, Vol. III, p. 370 note^b), bearing the inscription "Τριπολειτών ενν. anno 455," was evidently struck in commemoration of the finish of a Canicular or Sothic Cycle, which had rounded up its great revolution of ($4 \times 365 =$) 1460 years in the sixth year of this emperor, viz. in A. D. 143 (U. C. 896 [Varro]) If, then, the 455th year of the Seleucidic era, as computed by the people of Tripoli, commenced in the autumn of A. U. C. 896 [Varro] or A. D. 143, the first year of this seriation must have commenced in the autumn of A. U. C. 442 [Varro] or 312 B. C.; for $896 - 454 = 442$, or $455 - 143 = 312$ B. C.

5. The coin of Hadrian referred to before bears the inscription: "Τριπολειτών ηχν anno 428" (See Norisius pp. 72 and 99, or Clinton, *F. H.*, Vol. III, p. 368), and apparently commemorates the accession of Hadrian to the empire of Rome on the death of Trajan about the eleventh of August A. D. 116. As the death of Trajan occurred soon after the close of Nab. 863, which is accounted the last year of Trajan in the *Astronomical Canon*, the first year of Hadrian extended from August eleventh, 116 A. D., to August tenth, 117 A. D. Almost co-extensive and contemporaneous with this regnal year of Hadrian, the 428th year of the Seleucic Era must have run parallel with it from the fall of 116 A. D. to the fall of 117 A. D. If this comparison be correct (and we cannot see how all data can be otherwise harmonized), the initial year of the era must have begun in the fall of 312 B. C.

6. According to Eusebius' *History of the Church* (H. E. L. 13), the king and the people of Edessa employed a series of years evidently identical with the Era of the Seleucidae. For, in the king's letter to the great Galilaean, the year 340 is obviously

identified with the fifteenth year of Tiberius Caesar. For if the fifteenth year of Tiberius Caesar began on the nineteenth of August, 28 A. D., and continued to August eighteenth, 29 A. D., and the 340th year of the Edessan era extended from the autumn of 28 A. D. to the autumn of 29 A. D., as the references apparently intended to imply, they were practically synchronous and coetaneous. Such being the case, it follows that the first year of the Edessan era, like the first year of the Seleucic Era, began in the fall of 312 B. C.; for $340 - 28 = 312$ B. C., or, to be more exact, $340 - 28\frac{3}{4} = 311\frac{1}{4}$ B. C.

7. Referring to the decease of Augustus Caesar, or rather to the accession of the new emperor, Tiberius Caesar, we find that a coin dated "Δαμασκηῶν εκτ. anno 325" was circulated by the city of Damascus. With a view to memorializing either or both of these events, the coin was apparently withdrawn from circulation and preserved in memory of these or other events, like the census and lustrum, of the current year. The serial number attributed to this coin, 325, attests that its seriation must have commenced before the nineteenth of August, and continued for some months or days after it. "As Augustus died in August U. C. 767 [Varro]," concludes Fynes Clinton (*F. H.*, Vol. III, p. 368), "the 325th year must have been still current in August of that year. The first year therefore [of the Era of the Seleucidae] had commenced before August U. C. 443 [or 311 B. C.]."

8. Finally, a coin with the date 282 is adduced by the veteran chronologist and harmonist, Dr. Wieseler (*Synopsis*, p. 180 note 4), connecting it with Cleopatra's death and concomitant events. It is true, this numismatic testimony is connected with Cleopatra's downfall and death by the decisive sea-fight at Actium. The coincidence is easily demonstrated. If the battle of Actium, as Dion Cassius attests (*H. R. L.* li. c. i), was fought on the second of September of the year when Caesar and Messala Corvinus were consuls, it was fought *after* the last day of Nab. 718, August twenty-ninth, 30 B. C., for this year and day are ascribed to Cleopatra in Ptolemy's *Astronomical Canon*. On the other hand, it must have been fought *before* the last day of Nab. 719, which fell on August twenty-ninth, 29 B. C., for this year and day are assigned to Octavianus Caesar as the first of his undisputed monarchy. It must, therefore, have occurred in J. P. 4684 or 30 B. C., since there is no other second of September at our disposal. But the second day of September of the year 30 B. C. coincides with one of the closing days of Sel. 282, which Seleucidic terminology therefore conspires with the *Astronomical Canon* in confirming the battle of Actium to the second of September, J. P. 4684 or 30 B. C. But if we are right in setting down this event in the bounds of the 282nd year of the Seleucidae, we

shall also be found right in settling the beginning of the Seleucic Era in 312 B. C.

The foregoing eight references to the Seleucic Era, taken from the times during which Rome flourished as an empire, are as authoritative for the period covered as they are authentic. They cover, of course, only the latter portion (about one hundred years) of the entire period of about 235 years which we desire to recalculate with a view to reconstructing the Syro-Macedonian Calendar, and, with it, the life-time of Jesus Christ and the date of the first Christian Easter. There remains, therefore, the larger earlier portion of this period, from 165 B. C. to 30 B. C., and then to the life-time of Christ. We can best handle this part of chronology as we deal with the fourth stage of the Seleucic computation of years in their relation to Jewish national church and state affairs.

In this primeval stage of the Seleucic Era, the Jews, for the first time during their existence as a nation, came into contact with Rome. The contact, at first, was friendly and beneficial to the Jews, but, as it grew warmer and overweening, it developed into a conflict, in which the Jews lost out. Adapting the names of the participants in this approachment, we may style the entire period of the Jews' rise and fall in national importance the Jewish Roman, or, more definitely, the Asmonean-Herodian epoch; for it was under the Asmoneans (or Maccabees) that Judea revived and flourished, and under Herodian princes that that country declined and fell.

Now, since we have started out to make the chronology of this Jewish-Roman period, the groundwork of our proposed reconstructed calendar, as sound and solid, correct, and incontestable as possible, it is well to follow the lead or guidance of a pertinent chronological norm, (a metron) that can stand any amount of strain and tension, and, in the end, pilot us safely through all the whirlpools and rapids in the swirling stream of time. Such a chronological lead is afforded us in the quasi-Calippic Periods with their subsidiary Metonic Cycles, as they were used by the Jews, according to the best of our information. We say advisedly "quasi-Calippic" periods because they were neither absolutely correct nor altogether identical with the true Calippic Periods in use among the Greeks. They were neither coetaneous nor co-extensive with the genuine. But the Jewish "adapted" cycles fit into the framework or mold of the original Calippic Periods closely enough to be called, for want of a better name, "quasi-Calippic Periods" and "quasi-Metonic Cycles." As will be seen at a glance, both the genuine and the supposititious eras begin and end in the same year.

The authentic Calippic Periods, introduced in 330 B. C. by the Athenian astronomer Calippus, for the express purpose of insuring mathematical exactness, ran their unerring course through the centuries four times their natural length, until they were interdicted by the Roman emperor Augustus Caesar in 26 B. C., but were continued, without official sanction, in Palestine at least, until they were displaced and superceded by the Easter Cycle of St. Hippolytus in 222 A. D. These so-called Calippic Periods were not only recognized by the then-existing governments of the near East, but were cited and appealed to, as well-known standards of time reckoning, by historians, astronomers, and scientists of various kinds. They may, be astronomically verified, and dates, fixed by them, may well be regarded as placed beyond question or criticism. We may, therefore, with the utmost confidence, distribute the years of the Seleucic Era, in the mold of the Calippic Periods, in the following manner:

<i>Cal. P. No.</i>	<i>Olympiads.</i>	<i>Olymp. Yrs.</i>	<i>Julian Period</i>	<i>B.C.-A.D.</i>
I.	112 ³ = + 19	447 .. + 76	4384 = + 76	330 - 76
II.	131 ³ = + 19	523 .. + 76	4460 = + 76	254 - 76
III.	150 ³ =	599 ..	4536 =	178
IV.	169 ³ = + 19	675 .. + 76	4612 = + 76	102 - 76
V.	188 ³ = + 19	751 .. + 76	4688 = + 76	26 +
VI.	207 ³ = + 19	827 .. + 76	4764 = + 76	51 A.D. + 76
VII.	226 ³ = + 19	903 .. + 76	4840 = + 76	127 + 76
VIII.	245 ³ = 5	979 .. + 19	4916 = + 19	203 + 19
	250 ² =	998 ..	4935 =	222 A.D.

Subdivided into nineteen-year periods, so-called Metonic cycles, and limited to the epoch, the Asmonean-Herodian Era, which is to receive our particular attention, we may present them thus:

<i>Cal. P.</i>	<i>Met. Cycle.</i>	<i>Olympiads.</i>	<i>Olymp. Yrs.</i>	<i>Sel.</i>	<i>Jul. P.</i>	<i>B.C.-A.D.</i>
III. ¹	9.	150 ³ 5	= 599 19	.. 135 19	.. 4536 19	= 178 - 19
III. ²	10.	155 ² 5	= 618 19	.. 154 19	.. 4555 19	= 159 - 19
III. ³	11.	160 ¹ 4	= 637 19	.. 173 19	.. 4574 19	= 140 - 19
III. ⁴	12.	164 ⁴ 5	= 656 19	.. 192 19	.. 4593 19	= 121 - 19
IV. ¹	13.	169 ³ 5	= 675 19	.. 211 19	.. 4612 19	= 102 - 19
IV. ²	14.	174 ² 5	= 694 19	.. 230 19	.. 4631 19	= 83 - 19
IV. ³	15.	179 ¹ 4	= 713 19	.. 249 19	.. 4650 19	= 64 - 19
IV. ⁴	16.	183 ⁴ 5	= 732 19	.. 268 19	.. 4669 19	= 45 - 19
V. ¹	17.	188 ³ 5	= 751 19	.. 287 19	.. 4688 19	= 26 - 19
V. ²	18.	193 ² 5	= 770 19	.. 306 19	.. 4707 19	= 7 B.C. - 6
V. ³	19.	198 ¹ 4	= 789 19	.. 325 19	.. 4726 19	= 13 A.D. + 19
V. ⁴	20.	202 ⁴ 5	= 808 19	.. 344 19	.. 4745 19	= 32 + 19
VI. ¹	21.	207 ³ 5	= 827 19	.. 363 19	.. 4764 19	= 51 + 19
VI. ²	22.	212 ²	= 846	.. 382	.. 4783	= 70 A.D.

In filling the form of these nineteen-year cycles with historical data according to the numerical order and seriation of the Seleucid years, which, to facilitate our study, will from now on be co-ordinated with each of these cycles, we shall have the added advantage of outlining the history of the Jewish people in very close keeping with the natural stages and phases of their development, with the absolute assurance that all the events and incidents of their history are rightly placed. Thus the ninth and tenth Metonic, or first two nineteen-year cycles of the third Calippic Period, will tell of the struggles of the Jews for freedom and independence from Syrian rule, comprehending the years of the Seleucidae 135 to 173. The eleventh and twelfth Metonic, or the third and fourth nineteen-year cycles of the *third* Calippic

Period, comprising the years 173 to 211 of the kingdom of the Greeks, will relate to the liberty enjoyed by the principality and priesthood of Judea, being for the time not only free from Syrian interference, but also free from internal strife and disturbance. Cycles thirteen and fourteen, representing the first two Metonic cycles of the *fourth* Calippic Period, and taking in the years of the Greek kingdom 211 to 249, will show a Jewish commonwealth disrupted and torn asunder, the royalty and high-priesthood still independent of foreign overlordship, but divided against itself and doomed to decline and fall. Cycles fifteen and sixteen, finally, the other two Metonics of the *fourth* Calippic Period, including Sel. 249 to 287, will present the deplorable picture of both branches of the government, the royalty and the hierarchy, at loggerheads and at the mercy of a hostile foreign power. Yes, and though the next two cycles, seventeen and eighteen, the first two of the *fifth* Calippic Period, witnessed a revival of outward splendor under the tyranny of Herodian princes, the years 287 to 325 reflected only a borrowed magnificence, for the kingdom had departed from Israel. The next nineteen-year cycle, involving the second cycle of that kind in the *fifth* Calippic Period, Sel. 325 to 344, may be passed over in silence, for the nonce, in deference to our steadfast determination, not to attempt to fix any date in the vicinity of the great central fact to be established and forever stabilized until we have convinced ourselves of the absolute fairness and equity of the lines of evidence converging on this point. The last three cycles, however, representing the fourth Metonic cycle of the *fifth* Calippic Period, and the first two nineteen-year cycles of the *sixth* Calippic Period Sel. 344 to 382, shall be considered so much more thoroughly, inasmuch as this concluding section of Hebrew history presents the greatest abundance of information as to the looks and appearance of life in the times and seasons most closely related to the days when Jesus of Nazareth lived and died on the cross. We shall try to recapitulate the contents of these trenchant nineteen-year cycles, not with a view to narrating the full history of this epoch, but with this sole aim in mind to fix and confirm the outstanding chronological data contained in these calendar cycles and periods.

However strange it may appear, it is a fact that the first two cycles, like the last two, are by far the best dated and authenticated of the whole Asmonean-Herodian Era. Whether this is due to a nobler influence, like that of a superior government or a higher educational system, or other cause, we find the greatest abundance and wealth of chronological material at a time when the destinies of the nation were most completely under the domination of a foreign people. Accordingly we find the most perfect and complete time-determinations or dates in the beginning of

this era, apparently because the reports and representations of the current events are tied up in the terms and phraseology of the Seleucid Era. After a preliminary statement determining our bearings in general history, to wit, that it was at the time when Antiochus Epiphanes, the eighth king of the Seleucidae, ruled over Syria, from Sel. 137 or 175 B. C. to Sel. 147 or 166-165 B. C., let us now, more particularly, note that it was in Sel. 143 or 170-169 B. C. that this invader was repulsed in Egypt, and that he then turned, in a furious state of mind, on the stronghold by the wayside, held by a people strongly in sympathy with the Egyptians, the Jews of the city of Jerusalem. The event, of all in the sequel the most important, took place about two years later, in Sel. 145 or 168 B. C. This was the desecration and spoliation of the Temple "on the five and twentieth day of the month Caslen [or Apellaeus], in the hundred forty and fifth year" of the kingdom of the Greeks, as the historian of the Maccabees has it (1 Macc. I. 54. 59). The persecutor of the Jews perished on a marauding expedition "through the high countries" in Sel. 147 or 166-165 B. C. Under his son and successor, Antiochus Eupator, occurred the event of equal or even greater importance, the restoration and re-consecration of the defiled Temple. This preeminently outstanding event in Hebrew history gave occasion for the following gem of chronological crystallization, as treasured up for us by the Jewish historian Josephus (*Antiq. B. XII. C. VII. §§ 6. 7.*): "*So on the five and twentieth day of the month Caslen, which the Macedonians called Apelleus, they lighted the lamps that were on the candlestick and offered incense upon the altar, and laid the loaves upon the table and offered burnt offerings upon the new altar. Now it so fell out, that these things were done on the very same day on which their divine worship had fallen off, and was reduced to a profane and common use, after three years time; for so it was, that the temple was made desolate by Antiochus and so continued for three years. This desolation happened to the temple in the hundred forty and fifth year, on the twenty-fifth day of the month Apelleus, and on the hundred and fifty-third Olympiad: but it was dedicated anew, on the same day, the twenty-fifth of the month Apelleus, in the hundred and forty-eighth year, and on the hundred and fifty-fourth Olympiad. . . . Now Judas celebrated the festival of the restoration of the sacrifices of the temple for eight days [from week-end to week-end]; . . . and they made it a law for their posterity, that they should keep a festival, on account of the restoration of their temple worship for eight days [from Sabbath to Sabbath]. And from that time to this we celebrate this festival, and call it Lights. . . because this liberty appeared to us [i.e. blazed forth unto us like a great light] beyond our hopes.*"

By this exhaustive description approximately the tenth day ($15+10=25$) after the full moon of December, J. P. 4546 or 168 B. C. and approximately the tenth day after the full moon of December, J. P. 4549 or 165 B. C. (see 1 Macc. 1. 54), are the days clearly indicated as the positively ascertainable dates of respectively the desecration and the re-consecration of the temple, whether we reckon the years of the Seleucidae 145 and 148 in the historical, matter-of-fact way or in the hypothetical, hieratic fashion applied to the Egyptian years of Nabonassar. We shall, later on, have abundant opportunity to satisfy our minds of the absolute correctness of these Jewish-Syro-Macedonian dates. For the present, let us briefly survey the vista presented to us by the apocryphal or semi-biblical line of Seleucidic years employed for the dating of events in the Jewish-Roman or Asmonean-Herodian Era.

It is needless to repeat here what has been said of the epochal influence of Roman arms on Jewish affairs, in that it was the battle of Pydna which so impressed the Syrian king Epiphanes with the might of Rome that he withdrew from Egypt at a civilian's behest, and pounced upon Jerusalem by way of revenge. Nor need we now inquire into the significance of the fact, but it is a noticeable accident that the three years of desolation, Sel. 146, 147 and 148, are the counterpart of the three years of Rome 586, 587 and 588, according to the Capitoline computation, which are signalized by a specific mention in the Marbles. Suffice it to say that, after the Asmoneans' resolve to fight, if need be, on the Sabbath day, the desolate years, Sel. 146-148, were kept from being lean and barren years by the battles of Judas Maccabeus with Apollonius, Seron, Ptolemey, Nicanor, and Gorgias. While these engagements may be ranked as only of a minor character, they served to instill a wholesome dread of the Maccabees in the hearts of the nations round about them, so much so, that Judas and his brothers felt safe enough to refortify the city and re-consecrate the temple when the three bad years were out. And not only were they relieved of the obsession of fear of their enemies, they were rid of the tormenting incubus itself, their persecutor Epiphanes.

In the eleventh year of his reign, which corresponded to the last half of 165 B. C. and the first half of 164 B. C., Antiochus Epiphanes undertook an expedition into the higher plateaus of Asia. He perished in the beginning of his twelfth regnal year, which was the close of Sel. 149 or the late fall of 164 B. C. His son Eupator, a Minor, held the title to the throne during the rest of Sel. 149 and 150, while Philip, a friend of his father's, took unto him the ruling of the affairs.

In the earliest months of the year, or still in the winter season

of Sel. 151, Demetrius, the son of Seleucus, contrived to escape from Rome, where he had been held as hostage, and managed to make himself king. When he had fully established himself at Tripoli, he first sent Bacchides and then Nicanor against the Jews under Judas. Nicanor was utterly discomfited in the decisive battle of Beththoron. This rout of Nicanor is definitely fixed to the spring of 161 B. C. by the precise description of the day as a Sabbath-day (II Macc. 15: 1. 3. 4. 36). The year itself, the 151st of the era of the Seleucidae, is immutably fixed in its place, B. C. 162–161, as the seventeenth year of the third Calippic Period, by an observation of the autumnal equinox on the thirtieth day of Mesore, Nab. 586, which corresponded to the twenty-seventh of September, B. C. 162 (see Clinton's *F. H.*, Vol. III, p. 87).

The following year, Sel. 152, marked the death of the Jewish hero, Judas Maccabeus, in the spring of J. P. 4554 or 160 B. C., and the succession in leadership of his brother, Jonathan Apphus, while the following year, Sel. 153, noted the death of the renegade high-priest Alcimus, alias Jacimus, in the spring of 159 B. C. With this elimination of Alcimus from the scene there also disappears the direct control of the Jewish calendar by Syrian authority. The 153rd year of the Seleucidae is the nineteenth year of the ninth Metonic Cycle, or the last year of the first nineteen-year cycle of the third Calippic Period, and, besides, inaugurating a seven-years' spell of anarchy or interregnum in the supreme pontificate, it may well presage a drastic change in the administration of the calendar.

Having, at this point, arrived at the end of the ninth Metonic Cycle, which enters only fractionally into the computation of the Jewish-Roman or Asmonean-Herodian Era, let us here, for the sake of convenience and future reference, compute the number of days contained in this fragmentary factor of our problem. Accumulating the scattered units of the last four months of Sel. 148, five days from Apellaeus (or Caslen), twenty-nine days for Audynaenus (or Tebeth), thirty days for Peritius (or Shebat), and twenty-nine days for Dystrus (or Adar), we have ninety-three days for Sel. 148, five times 354 days = 1770 days for Sel. 149–153 incl., plus twice thirty days for the two embolismic months that must be inserted to equalize lunar and solar time: ergo $93 + 1770 + 60 = 1923$ days.

The tenth nineteen-year cycle embodied in the frame of the Calippic Periods, already withdrawn from possible Syrian interference, was probably divested of its Syro-Macedonian aspect, and clothed or rather swathed in the most primitive, but patriotically nativistic character of a Metonic cycle. Of course it is understood that the calendric aspect of its years does not affect the seriation of the cycle. The first year of this tenth cycle, ac-

cordingly, the year Sel. 154, is permanently held in its proper place as contemporary with autumn of 159 to autumn of 158 B. C. by another observation of the autumnal equinox made by Hipparchus "in the twentieth year of the third Calippic Period: on the first day of the epagomenae, the 361st day of Nab. 589 = September twenty-seventh, B. C. 159." Since Sel. 153, and with it the nineteenth year of the ninth Metonic cycle, came to an end on the 265th day of the year 159 B. C., i.e. September twenty-second, it is remarkable how painstakingly accurate and precise the famous astronomer was in dating his observation "in the TWENTIETH year of the third Calippic period."

In the same manner as the first, the second year of the tenth nineteen-year cycle, Sel. 155 is stabilized by another astronomical observation relating to the autumnal equinox "in the twenty-first year of the third Calippic Period, fixing this Syro-Macedonean twelvemonth unalterably to the autumn of 158 B. C. to the autumn of 157 B. C. = September twenty-seventh, B. C. 158" (see Clinton, *F.H.*, Vol. III, p. 91).

In this 155th year of the Seleucidae, two years after the decease of Alcimus, and four years before the investiture of Jonathan with the high-priesthood, consequently fourteen (not four) years before he died, it was that Jonathan Apphus was summoned to the leadership and governorship of Judea. In this year, too, it was that this brother of Judas Maccabeus defeated Odonarkes at Bethbasi, and gave peace and independance to Israel.

In Sel. 160, the twenty-sixth year of the third Calippic Period, Alexander Bala, the son of Antiochus Epiphanes, possessed himself of the kingdom at Ptolemais, rivalling with his cousin Demetrius in the offer of patronage and promotion to Jonathan. "So in the seventh month of the hundred and sixtieth year, at the feast of tabernacles, Jonathan put on the holy robe" of the high-priesthood, and governed the people as their chosen ruler until he died about ten years later in Sel. 169 or 144-143 B. C.

By a peculiar prank of chance the first contact of the Greek Calippic Period with the Egyptian Nabonassan Era is signalized by a matrimonial connection of the royal house of the Seleucidae with the royal house of the Ptolemys. This occurred in the 162nd year of the Seleucidae and the 598th year of the Nabonassan Era; Sel. 162, the twenty-eighth year of the third Calippic Period being almost perfectly conterminous with Nab. 598 (September thirtieth, 151, to September twenty-ninth, 150 B. C.) "So Ptolemee," says I Macc. X. 57, "went out of Egypt with his daughter Cleopatra, and they came to Ptolemais in the hundred three-score and second year: where king Alexander meeting him, gave

unto him his daughter Cleopatra, and celebrated her marriage at Ptolemais with great glory, as the manner of kings is."

Within the next three years complications in the dynasty of the Seleucidae increased, for in Sel. 165, the thirty-first year of the third Calippic Period, "came Demetrius the son of Demetrius out of Crete into the land of his fathers." (I Macc. X. 67.)

Strongly as it is already intrenched in the rockbed of chronology, we shall nevertheless give what corroboration we can to the system of time we are presenting. In the thirty-second year of the third Calippic Period, which was the thirteenth of the tenth Metonic Cycle, and known as Sel. 166, the Athenian astronomer Hipparchus made an observation on the autumnal equinox, and this is said to have matched "the third day of the epagomenae, the 363rd day of N. E. 601," which, in terms of the Julian calendar, was September twenty-sixth, 147 B. C. In the following spring of the same thirty-second year of the Period, "on the twenty-seventh of Mechir, N. E. 602, Hipparchus observed the vernal equinox." This corresponded to the twenty-fourth of March, 146 B. C. And, once more, only a few days after the expiration of this same thirty-second year, but now, with precision, in the thirty-third year of the third Calippic Period, "Hipparchus observed again the autumnal equinox, on the 364th day of N. E. 602," which Nabonassan Egyptian day corresponded to the Julian date of September twenty-seventh, B. C. 146 (see Clinton, *F. H.*, Vol. III, p. 101-5). Now, whether designed as a memorial of the fall of Carthage in Africa and of Corinth in Greece or not, this accumulation of proof serves the general purpose of reinforcing our system with the multiplied strength of a compound coincidence. Whatever important events took place in the two years thus distinguished (Sel. 165 and 166), the weight of evidence in favor of them falls into the balance in support of the whole series of Seleucid years, both as they go to make up the several Calippic Periods and as they constitute the Asmonean-Herodean Era. Whatever event, therefore, occurred in the wake of Sel. 165 and 166, that event is immediately sustained by the preceding evidence. "So, then [in Sel. 167] Ptolemee entered into Antioch, where he set two crowns upon his head, the crown of Asia, and [the crown] of Egypt. . . . So Alexander fled into Arabia, there [as he thought] to be defended: but [instead of that] king Ptolemee was exalted: for Zabadiel the Arabian took off Alexander's head, and sent it unto Ptolemee. King Ptolemee also died the third day after, and they that were in the strongholds were slain one of another. By this means Demetrius reigned in the hundred three-score and seventh year" (I Macc. XI. 13. 16-19). This 167th year of the Seleucidae was the thirty-third year of the Third Calippic Period, and coincided with the 603rd year of the Nabonassan Era,

which 603rd year was the first regnal year of Ptolemy Euergetes II, (also called Physcon), when, according to the *Astronomical Canon*, a change in the royal personel must have taken place (146–145 B. C.)

Now, while both branches of the royal house of Syria were trying to curry favor with Jonathan, the prince and high priest of Israel, "when Jonathan saw that the time served him [Rome having reached the peak of power and prominence in the world], he chose certain men, and sent them to Rome, for to confirm and renew the friendship that they had with them" (I Macc. XII. 1). We know not what advantages accrued to Jonathan from his dickering with Rome, but we find him building strongholds in Judea and trusting his person once too often in the power of his enemies; for—so I Macc. XII. 48 and XIII. 23 relate—"as soon as Jonathan entered into Ptolemais, they of Ptolemais shut the gates, and took him," and, when Tryphon, the Syrian prime-minister, aspiring to his master's throne, "came near to Bascama, he slew Jonathan, who was buried there." This must have happened in the winter of Sel. 169 or 144–143 B. C.; for "there fell a very great snow" shortly before the murder, by reason whereof the Syrian general could not carry out a manouever with his cavalry, as he had intended, and in lieu thereof took it out on Jonathan. Jonathan therefore died nine and a quarter years after his investment with the high-priesthood, having served fifteen and three quarter years as leader of his people after the death of Alcimus.

The following date in Jewish history, expressed in terms of the Seleucic Era, 170, or of the Christian Era 143–142 B. C., is indeed one of maximal proportions and importance. It introduces the principality and high-priesthood of Simon, the only surviving brother of Jonathan and Judas Maccabeus. It was signalized by the recognition of the independence of the Jewish commonwealth by Demetrius, the king of Syria. "Thus," says the author of I Macc. 13: 41. 42, "the yoke of the heathen was taken away from Israel in the hundred and seventieth year. Then the people of Israel began to write in their instruments and contracts: 'In the first year of Simon, the high-priest, the governor and leader of the Jews.'" The year itself was the thirty-sixth of the Third Calippic Period, and was distinguished as such in the official dating of an observation made by Hipparchus on the autumnal equinox. This authoritative observation was made "in the thirty-sixth year of the third Calippic Period, on the fourth day of the epagomenae," which synchronized with the 364th day of N. E. 605, or September twenty-sixth, B. C. 143. (See Clinton, *F.H.* III, 109.)

The thirty-sixth year of the Third Calippic Period being also

the seventeenth year of its own second subordinate nineteen-year cycle, it may be observed that the first three years of Simon, the high priest, were also the last three years of this nineteen-year cycle, Sel. 170, 171, and 172 corresponding with the Julian years 143-140 B. C. Of these three years the last concludes the units of the cycle with an exemplar of documentary and monumental epigraphy. In honor of some event or incident of this year, the people "wrote it in tables of brass, which they set upon pillars in mount Sion: and this is the copy of the writing: The eighteenth day of the month Elul, in the hundred three score and twelfth year, being the third year of Simon the high-priest" (I Macc. XIV. 27).

The third nineteen-year cycle of the Third Calippic Period, the eleventh in all, began with the year Sel. 173, so the following year, Sel. 174, was the fortieth year of the Period. This marks the beginning of the adventurous reign of Antiochus Sidetes, commencing a series of coins extending from 174 to 184, when he was slain in the middle of the final year, Sel. 184 or 129-28 B. C. The first of these years, Sel. 174, also brought back from Rome the ambassadors sent by Simon the high-priest (I. Macc. XIV. 24) in the summer of Sel. 172, carrying letters to the kings and countries from "Lucius, consul of the Romans." (I. Macc. XV. 15. 16). This reference to a Roman consul by the name of Lucius does not help us any, since no man by that name served in the consular office at that time. There were, however, several persons then in public life who had been consuls a year or two before: *Lucius* Caecilius Metellus Calvus, *Lucius* Aurelius Cotta, *Lucius* Hostilius Mancinus, *Lucius* Mummius, etc., etc. (Compare Clinton, *F. H.*, Vol. III, p. 378).

The first book of the Maccabees, so helpful to us hitherto, closes its graphic account with the 177th year of the Seleucidae, relating the treacherous assassination of Simon and his two sons, Mattathias and Judas. We are told (in chap. XVI. v. 14, 16): "Now Simon was visiting the cities that were in the country, and taking care for the good ordering of them; at which time he came down himself to Jericho with his sons, Mattathias and Judas, in the hundred threescore and seventeenth year, in the eleventh month called Sabats where the son of Abubus, receiving them deceitfully into a little hold, called Docus, which he had built, made them a great banquet: howbeit he had hid men there. So when Simon and his sons had drunk largely, Ptolemee and his men rose up, and took their weapons, and came upon Simon into the banqueting place, and slew him, and his two sons, and certain of his servants." The month called Sabat being in every case, and in every kind of reckoning, coincident with the winter month, February, the date of Simon's death can only be placed

in the front of 135 B. C. But the Seleucid position of year and month is sufficiently stabilized by its own inherent proof, being established by its own rotation as the forty-third year of the Third Calippic Period and by an additional connotation by the astronomer Hipparchus. In this case, the indefatigable observer connoted the vernal equinox on the twenty-ninth of Mechir in the forty-third year of the Third Calippic Period," the Egyptian date in N. E. 613 corresponding to March twenty-third, B. C. 135 (Cf. Clinton, *F. H.*, Vol. III, p. 113).

With the transition from the book of the Maccabees to the *Antiquities* of Josephus, and the transfer of the priesthood from Simon Mathes to his son John Hyrcanus, another change takes place in the ritual and liturgical computation of the Jewish year—that of the Seventh or Sabbatic year. The location of the year of rest was dislodged by the exigencies of war. The expedition of Hyrcanus against the assassins of his father consisted principally in a siege of the stronghold in which his perfidious brother-in-law had intrenched himself. "As the siege was drawn out into length," says the historian (*Antiq. B. XIII. C. VIII. §1*), "that year on which the Jews use to rest, came on; for the Jews observe this rest every seventh year, as they do every seventh day." The siege having evidently been begun in the spring, and continued throughout the summer, of the year in which Simon was murdered, the reference to the year of rest can pertain only to Sel. 178, beginning with the autumn of 135 B. C. and ending with the autumn of 134. When, therefore, an invasion of Judea by Antiochus, "in the fourth year of his reign, and the first year of the principality of Hyrcanus" (§2), and a drought accompanied by a protracted want of water and terminated by a large shower of rain at the setting of the Pleiades (i.e. early in the spring, about February), and the arduous work of raising a hundred towers of three stories high, together with the excavation of a double ditch, deep and broad, and a thousand minor impediments and hindrances delayed and prolonged the investment, a second feast of Tabernacles came around, so that, in the course of this one Sabbatic season, we have not *one*, but TWO great feasts of Tabernacles, one at which Hyrcanus was the beleaguerer on the *outside* of the walls of the stronghold, the other at which he was the beleaguered *within* the walls of Jerusalem. Whatever may have been the efficient cause of protracting the term of Sabbatic rest for land and nation from twelve to eighteen months, from now on we meet with Sabbatic year-terms which cannot be understood except as seventh-year periods extending from spring to spring instead of from autumn to autumn. Be that as it may, Hyrcanus availed himself of the opportunity presented by this ancient festival to surrender gracefully to Antiochus, who re-

stored the settlements received from the forefathers reflected in the payment of three hundred talents of silver, and the giving of hostages, one of whom was Hyrcanus' brother. "But still he broke down the fortifications that encompassed the City. And upon these conditions Antiochus broke up the siege and departed." (Jos., *Antiq.*, B. XIII, C. VIII. §3)

The fact that the forementioned siege of Jerusalem terminated in a year of Sabbatic rest, just as it did in the year of destruction under Titus, may serve as a means of determining and establishing all the Sabbatic or seventh-year periods in the Jewish-Roman or Asmonean-Herodian Era. Since (134 B. C. + 70 A. D. =) 204 years represent twenty-nine weeks of years and one over, and in this interval no further transposition can occur, it is evident that every Sabbatic twelvemonth from now on is not only determined and located for its own sake, but is turned into a means of time-determination for the whole period. We shall have occasion to avail ourselves of this new criterion later on.

In close connection with the sacrilegious spoliation of the sepulchre of David by the supreme custodian of religious observances himself, and the subservient league of friendship and mutual assistance made between Hyrcanus and Antiochus [or rather *by* Antiochus], the Jewish historian relates certain incidents which occurred when John Hyrcanus the high priest, along with Antiochus, participated in an expedition against the Parthians. As the date of the incident narrated involves the knowledge of prevailing calendric conditions, which we have not, as yet, ascertained, we are compelled to postpone the consideration of this date to some future time. Suffice it to say that the Pentecostal affair alluded to occurred at a not very distant day after the consulship of Caius Sempronius, since, we are told, "But Hyrcanus the high-priest was desirous to renew the league of friendship they had with the Romans," shortly afterward, and that was done, as recorded, "on the eighth day before the Ides of February, when Lucius Manlius—and *Caius Sempronius*—were present." (Joseph, *Antiq.* B. XIII. C. IX. §2). Caius Sempronius was present at the ratification of this league as a proconsul, since he had been consul in the year before, A. U. C. 624 (cap.) or 129 B. C. The year, therefore, in which the league of friendship with the Jews was renewed was the Julian year 128 B. C. or the Seleucic 184, and Sel. 184 is the fiftieth year [19+18+12] of the Third Calippic Period. Though not with this end in view, the 184th year of the Seleucidae is established in its bearings scientifically by Hipparchus. This astronomer of old "observed the vernal equinox on the first of Phamenoth in the fiftieth year of the third Calippic Period N. E. 620," which corresponded to

March twenty-second, B. C. 128 (see Clinton, *F. H.*, Vol. III, p. 119).

The following year, Sel. 185, though not so designated in phrase or figure, is the fifty-first year [$19+19+13$] of the Third Calippic Period and contemporaneous with the 621st year of the Nabonassan Era. Like the preceding year, the present 185th is reinforced in its position by two astronomical observations by Hipparchus on the sun and on the moon. The first was taken at Rhodes on the 221st day of N. E. 621 = May second, B. C. 127; the other on the 287th day = July seventh, B. C. 127. (cf. Clinton, *F. H.*, Vol. III, p. 121).

The next two years, Sel. 186 and 187, which mark the close of king Demetrius' life, are very forcefully sustained, not only by documentary evidence, but by the witness of the coins put into circulation by the monarch in his lifetime. The last coinage of Demetrius is dated in the 187 year, which began in the autumn of 126 B. C. as the fifty-third year [$19+19+15=53$] of the Third Calippic Period, and terminated his career and his reign of twenty years from 167 to 187 of the Seleucidae. It is further certified as the initial year of the Tyrian Era, when the cosmopolitan municipality of Tyre was granted autonomy or independence from the kingdom of Syria. And, though not stated in express terms, it was coincident with the third year of the 163rd Olympiad, when Jason was archon at Athens, and M. Plautius Hypsaeus and M. Fulvius Flaccus were consuls at Rome [125–124 B. C.].

The subsequent twelvemonth, Sel. 188, has the honor and distinction of being the last of the series to be mentioned in a biblical apocryphal book. It dates the resolution of the Jewish colony in Egypt to religiously observe the feast of the Illumination and Purification of the Temple, either in imitation of the feast of Tabernacles "*upon the five and twentieth day of the month Caslen*" (II Macc. I. 18), or as a substitute for the feast of Tabernacles in the month Caslen (v. 9). It is well to remember this popular vote (or referendum) with a view to the correct interpretation of events still in the distant future.

From the close of Sel. 187 to the end of 191, but not 192, appear the coins struck by a queen regent of Syria, Cleopatra, in conjunction with her son, Antiochus Grypus. Having shot dead an elder son, Deleucus, for presuming to seize the government without consulting her, she ruled with the assistance of Grypus, until he compelled her to drink the poison that she had mixed for him, apparently at the beginning of Sel. 192. This brings us to the close of the third nineteen year cycle of the Third Calippic Period, the fifty-seventh year of this period (Sel. 191) being tantamount to fall of 122 to fall of 121 B. C.

For the duration of these first three cycles, Hebrew history received the benefit of authentic and accurate dating by means of the Seleucic series of years, the Syro-Macedonian calendar, the Calippic calendar cycle, a system of coinage and currency of imperishable value, a Jewish line of priests and princes, and a Jewish Sabbatic order of days and years. With the next nineteen-year cycle we shall fare less fortunately. We shall find a Jewish royalty as well as a Jewish high-priesthood—a dynasty of kings as well as a primacy of priests and pontiffs. Chronological lore, however, will not be improved. On the contrary. Dating by national coinage will cease by Sel. 207. The coins of Cyzicenus are the last to have the years of the Seleucidae engraved upon them. The Jewish kingdom and the Jewish pontificate will both be independent and free from outside interference, but both will be more and more severed from each other, and soon decline into dependencies of foreign powers. Correspondingly, the chronology of the Jewish church-and-state will be less and less explicit and precise.

In the transitional years from the eleventh to the twelfth nineteen-year cycle, or, to be more exact, in the fifty-seventh and fifty-eighth years of the Third Calippic Period (Sel. 191 and 192), probably lies the stumbling-block which caused the Jewish historian, Josephus, to fall into the error of ascribing twenty-nine years of rule to Antiochus Grypus, and thirty-three years of sacerdotal dignity to John Hyrcanus (see *Wars*, B. I. C. II. §8). Instead of overlapping the first two (associate) years of Grypus with the last two years of his mother, Josephus counted them as straightforward consecutive years. Reckoning by Olympiads, he, in consequence, misplaced the invasion of Judea by Antiochus Sidetes in Olymp. 162¹ instead of 161²/₃, and the abomination of desolation as extending from Olymp. 153³ to Olymp. 154² instead of Olymp. 153¹ to 153⁴: in each case placing the respective events two years closer to his own point d'apui than conforms to the matters-of-fact. The joint-reign of Antiochus Grypus began in Sel. 187, extending from that point, through twenty-nine years, to Sel. 216=Ol. 170⁴, according to Josephus, or, according to others, through twenty-seven years, from Sel. 189, Olymp. 164. or 123 B. C., to Sel. 216, Ol. 170. or 96 B. C. The principality of Hyrcanus, beginning in Sel. 177 or 135 B. C., on the other hand, extended from that immutable point, through thirty-one years only [viz. thirty years and a fraction: see Jos., *Ant.*, B. XIII. C. X, §7 and B. XX. C. X. §1], to Sel. 207, Ol. 168³⁻⁴ or 105 B. C. For, counting backwards from Sel. 243, Ol. 177³⁻⁴ or 69 B. C., the consulship of Q. Hortensius and Q. Metellus, nine or eight and one half years for Queen Alexandra, 27— or 26½ years for Alexander Jannaeus, and one— or one half year for Judas

Aristobulus, it is plain that only thirty-five and one half years or, at most, thirty-six years, can intervene between the inaugural year of the younger Hyrcanus, who was appointed high-priest by his mother in 69 B. C., and the death of the elder Hyrcanus, who, as a liege subject of Antiochus, accompanied him on his Parthian expedition. But, if only thirty-five and one half years, or at the utmost thirty-six years, are required to bridge the chasm between the two dates mentioned above, it is evident that $[2+1+27+9=]$ 39 full years, or, at the least, $[2+1+26\frac{1}{2}+8\frac{1}{2}=]$ 38 incomplete years, cannot be compressed into the space of thirty-six. The coincidence, then, of two over-estimates of time to the same extent of two years is evidence enough that the larger amount of time ascribed to both Antiochus Grypus and John Hyrcanus is necessarily erroneous. We must, therefore, of necessity, adopt the more moderate amounts assigned to the two contemporary rulers, twenty-seven years for the Syrian, and thirty-one for the Hebrew.

A measure of circumstantial evidence for the death-year of John Hyrcanus and the rise of Jewish royalty as originated by his son and successor, Judas Aristobulus, may be further derived from the fact that the last coin issued by the Syrian king, Cyzicenus, was that of Sel. 207. How far the reins of government had slipped from his hands by this time, we are not able to say. We know that Cyzicenus had been defeated by Aristobulus and Antigonus, the two oldest sons of Hyrcanus, about the year 201 Sel. We further know that, about the same time, shortly before or after his discomfiture in Samaria, the Sidonians had achieved their independence and established a chronological era of their own. We consequently know that subserviency to the Syrian king had ceased some five or six years before Sel. 207, and that the son of Hyrcanus felt free and powerful enough to place a diadem upon his own head. The cessation of coinage in Sel. 207 or 105 B. C., may, therefore, be taken to indicate a loss of prestige of the Syrian and a resumption of privilege and power by the Judean. The year in question (Sel. 207) would be the seventy-third of the Third Calippic Period, or the sixteenth of the twelfth nineteen-year cycle, which closes the period at Sel. 210 or 103 B. C.

The next two nineteen-year cycles, which deal with the newly-created dynasty of co-existent kings and priests of Judea, present the poorest prospect of dating events with chronological precision and exactitude. Aside from the short notice of Ptolemy (Lathyrus' subjugation of all Judea, the brief account of Alexander's deliverance from submission to this Ptolemy Lathyrus by Cleopatra, the queen of Egypt, the bare mention of the obligation put upon him by the league of mutual assistance con-

tracted with Cleopatra, the mere resume of the internecine wars conducted against each other by the successors of Antiochus Grypus and Cyzicenus, and the naked list of cities captured in the aggrandisement of Judea from the Syrians and Idumeans and Phoenicians, there is not one scientific date inscribed in the most nationalistic and nativistic phase of Jewish history. Only twice does the historian condescend to divide the reign of Alexander Jannaeus into smaller sections of three years each, one in war, and the other in a quartan ague, but in no case does he deign to give us a definite date for any of the transactions or incidents of his reign. Luckily for us, the march of time went on without intermission and without fail in the matter of keeping a dependable record: time was kept and recorded in the cycles and periods named for Meton and Calippus. While, the open display of the Seleucic years disappeared from the coins and official documents and monuments of the age, the unobtrusive, unostentatious use of the quasi Calippic and Metonic cycles persisted, even as we, in our own day, have seen the unreformed, uncorrected Julian calendar perpetuated in spite of its manifest error and shortcoming. In this quiet conventional way of every-day vogue, the series of Seleucic years continued, as we have seen, until deep into the Middle Ages of the common Christian Era, like the current of an underground river, strong as ever, and constant in its flow, but intermittently welling up in the form of a powerful spring, just as if to prove its existence and its extraordinary size and strength. How many times, and in what locality, and under what conditions, in Arabia, Africa, Europe, or Australasia, this underground river burst forth into the light of day, is of no consequence and does not concern us. For us it is enough if we take note of the precious instances in which the subterranean stream of the Seleucic computation gave proof of its continuance and consistency in relation to the life and history of the Jews.

So, taking leave of those times in the history of the Jews when they as a nation maintained their greatest show of power (if power it really was), we touch upon those cycles of the Fourth Calippic Period—the fifteenth and the sixteenth—when we only skim over the distance and but barely scratch the surface of this interval. In the scope of the period thus indicated, we find but one date expressed in the phraseology of the Seleucidae, but whatever luster and glamor it lacks by reason of its forlorn and lonely appearance, it makes up in the weight and momentum of its unique importance.

The date we refer to is Sel. 282, the fifteenth year of the sixteenth nineteen-year cycle, and the seventy-second of the Fourth Calippic Period. In regard to this date, Dr. Karl Wieseler, in his *Synopsis* (footnote p. 180), remarks: "Mionnet (*Description*

des Medailles Antiques, Tom. V, p. 576) mentions four coins of his belonging to the period 280–287, of the era of the Seleucidae = 33–26 B. C. He states, however, that the date 280 is defective on one of the coins. As this bears the head of Octavianus, who did not become master of the East until the battle of Actium, 282, the date must be stated incorrectly [by Mionnet]. On the other hand, we have a coin with the date 282. It is possible that Augustus at that time assigned to Zenodorus some provinces that had become vacant by Cleopatra's death. The expression *επαρχία* in Josephus perhaps indicates this."

Now this numismatically authenticated date, Sel. 282, represents one of the most phenomenal reappearances of the Seleucic count on the surface of world happenings in the demarcation of the third and fourth phases of universal civilizations. As every student of ancient history knows, the four general phases are described, in biblical imagery, as the kingdom of gold, the kingdom of silver, the kingdom of brass, and the kingdom of iron (see Dan. II, 32, 33), which are usually interpreted as denoting the civilizations of Babylon, Persia, Greece, and Rome. Correctly or not, they are, in this case, chronologically outlined in Ptolemy's *Astronomical Canon*, as follows:

1. Babylonian kings	twenty in number	209 years.
2. Persian kings	ten in number	215 years.
(including Alexander of Macedon		424 years.
3. Grecian kings	eleven in number	294 years.
	twelve in number	718 years.
4. Roman emperors	twelve in number	189 years.
		907 years.

Hence it will be seen that, as the parts of the image [of Daniel II. 32, 33] melt into each other, forming jointly one grand succession of supreme imperial domination [of Egypt and Judea], so the Canon of Ptolemy exhibits what may be called a picture of unbroken imperial rule, though administered by four successive dynasties, from Nabonassar to Augustus and his successors." (see Faber's *Sacred Calendar of Prophecy*, Vol. II, p. 7, or Guinness' *Light for the Last Days*, p. 401) In other words, at this epochal and pivotal conjuncture, so sharply pointed out, 718 years balanced against 189 years of still current Roman rule, the 907 years of the Nabonassan Era are virtually poised on the year of the Seleucidae 282. From this year, and thereafter, the Egyptians reckoned their own subjection to Roman rule, and the Jews as well as other nations who employed the Seleucic era, computed the duration of the iron kingdom's sway. It is, therefore, important to know just how perfectly this Seleucic notation

of time as to Roman affairs, "Sel. 282," succeeds in stabilizing its great event.

Being the fifteenth year of a nineteen-year cycle, it is clear that we may subtract four lunar years of 354 days each plus two intercalary months of thirty days each from the total amount of days contained in a nineteen-year cycle, so that, for the sixteenth nineteen-year cycle, we shall have the first fifteen years' time remaining. Thus, $384 + 354 + 354 + 384 = 1476$. 1476 days deducted from 6940, the aggregate of nineteen lunar years, leaves 5464 days. Then, summing up the number of days from the beginning of the Jewish-Roman or Asmonean-Herodian Era to the end of Sel. 282, according to the unaltered way of reckoning in vogue among the Gentiles, we have: 2100 for the ninth nineteen-year cycle (see above p. 224), 6940 for each of the six complete cycles (10–15), i.e. $6940 \times 6 = 41640$ days, and 5464 days for the unfinished sixteenth cycle (as above): consequently, $2100 + 41640 + 5464 = 49204$ days on the Jewish side of the balance. On the other hand, according to the Roman mode of calculation, the number of days in the interval of 134 complete years between J. P. 4549 or 165 B. C. and J. P. 4684 or 30 B. C., will be $[365 \times 134 =] 48910$ days + 33 bissextile or leap-year days + nine days in 165 B. C. [Dec. 22–31] = 48952 days. The difference between the two counts will show how far the 282nd year of the Seleucidæ extended into the Roman year, which may be best noted as J. P. 4684 or 30 B. C. Then, $49204 - 48952 = 252$, the 252nd day of the Roman year, will designate the date of the last day of Sel. 282, whether we define it more specifically in terms of the newly formed, but already DEformed Julian calendar or according to the re-reformed calendar known as the Augustan or Gregorian. According to the former, having a February of twenty-nine days and an excess of bissextile intercalations (one every three years instead of four) the calendric date of that last day will appear two days earlier than it is according to the latter, which has its February reduced to twenty-eight days in common years and displays a total of only four leap-year intercalations. Referring next then to the week-day character of that last day of 282 Sel., and the 252nd of 30 B. C., it is evident that it must have been a Sunday or first day of the Jewish week, since 49204 days represent 7029 weeks and one day, the first day of the 7030th week of the era. According to the re-reformed Augustan-Julian calendar, the 252nd day of the year, J. P. 4684 or 30 B. C. being a leap-year $[46 - 30 = 16 \div 4 = 4!]$, was September eighth, a Sunday, demanding the Dominical letters GF, but according to the former deformed or mismanaged Julian calendar, having interpolated a supernumerary bissextile, the 252nd day was the seventh of September, and a Sunday as required by the letter E. If, then,

the battle of Actium was fought on the second of September [IV. Non. Sept.] as Dion Cassius says it was, the date of the battle is not only included in the 282nd year of the Seleucidae, but is confined to the last week of the 282nd year. It is hedged in within the borders of Sel. 282 securely enough to make the location unmistakable.

There is, however, a slight discrepancy as to the date of the Actiac sea-fight. Another Roman author, Macrobius, gives as a reason for Augustus Caesar's predilection for Sextilis (to be named Augustus) that Egypt was brought under the authority of the Roman people *in the month of Sextilis*, that is to say, in the month of August, not in September. Now if, by the subjugation of Egypt, the transaction at Actium is meant rather than the suicides of Antony and Cleopatra exactly a year after the naval encounter, then the date of the battle of Actium may have been the "IV *cal.* Sept." rather than "IV. *non.* Sept.", that is to say, the twenty-ninth of *August* rather than the second of *September*. This would bring the emperor's preference of Sextilis (or August) into conformity with the resolution of the Senate that the month Sextilis had been more favorable for Augustus than the month of September in which he had been born. Moreover, this alteration would not only emplace the decisive battle higher up on the Seleucic year of 282, but also settle its date upon the last day of the Egyptian year 718, which, however, is ascribed by Ptolemy to the defeated queen Cleopatra. It is, therefore, preferably to be supposed that the senate's resolution referred to the actual surrender of all authority by Cleopatra to Octavianus, the surrender of life and lordship on the last day of 719 Nab., the last for Cleopatra, the first for Octavianus Caesar. This will admit the truthfulness of the statements of both Dion Cassius and Macrobius, the former averring the transfer of authority *de jure* on September second, J. P. 4684 or 30 B. C., the latter the transfer *de facto* on August twenty-ninth, J. P. 4685 or 29 B. C., allowing room for the occupation of Alexandria on the twenty-seventh of March in the interval. Thus, with the transfer of empire the transition of world-civilization from Greek to Roman may also be said to have been accomplished in the 282nd year of the Seleucidae, the 719th year of the Nabonassan Era, and in the thirtieth year before the beginning of the vulgar Christian Era.

The soon following inception of the *Fourth* Calippic Period, which was to begin in the year 26 B. C. was rendered conspicuous mainly by an attempt at its suppression by the great Roman emperor Augustus. This deliberate authoritative attempt at suppression is the best possible proof that this grand period of the Greek-loving peoples had not fallen into desuetude. Indeed, it is far more probable that its use was persisted in in private life by

the people than that it was later on resumed after a lapse of centuries. The year Sel. 287 is the last of a series of coins in the possession of Mionnet belonging to the period 280-287 of the Seleucic era = 33 to 26 B. C., and was manifestly singled out for attack by the champions of Roman civilization because it was the initial year of the Fourth Calippic Period. The year Sel. 287 would have opened up a new era of adherence to Greek culture in daily vogue and usage. To prevent a further cultivation of the alien Greek, and to encourage a preference for domestic Roman manners, the emperor prohibited the use of the Calippic calendar-cycle in this year, Sel. 287 or 26 B. C. That, however, this attempt at extermination was not successful (no more than that on the Egyptian system of keeping time), and that the series of Calippic Periods did not become extinct, may be seen from the force of the next eruption, when the Seleucic Era, like a giant geyser, broke forth and spouted again.

The next gigantic display of its continued existence occurs in the very middle and central year of the *Fourth* Calippic Period, the thirty-ninth year of the Period or the first of the third nineteen-year cycle of this Period, the year Sel. 325. It is immortalized on a coin of Augustus (see Clinton, *F. H.*, Vol. III, p. 368), and, being coetaneous with autumn of 13 A. D. to autumn of 14 A. D., it was obviously preserved in commemoration of the great emperor's death or of the accession of Tiberius Caesar. Being almost coextensive and conterminous with the Egyptian year Nab. 761, there can be no boundary dispute as to its chronological location. It is therefore highly interesting to note what evidential value accrues from the preservation of this specimen of Sel. 325 coinage.

Beginning, as it does, in the fall of J. P. 4726 or 13 A. D. and terminating in the fall of J. P. 4727 or 14 A. D., the Seleucic year 325 can have embraced only ONE nineteenth day of August, just as truly as there was only ONE particular day on which Augustus died. That is to say, the one and only day denominated and known as the nineteenth of August within the bounds of Sel. 325 or the borders of 13-14 A. D., was the nineteenth of August in the Julian year J. P. 4727 or the Christian year of grace 14 A. D., the date almost universally acclaimed and accepted as the authentic year of the great emperor's death. It goes without saying, then, that, if the Seleucic year 325 possesses any relevancy to the decease of Augustus or to the accession of Tiberius Caesar, it lends no evidential authority to the anachronistic system of chronology which places these two matters of fact in 13 A. D. or J. P. 4726. Its evidential trend is as one-sided and exclusive as that of Nab. 761, which began on the twentieth of August, 13 A. D., and ended on the nineteenth of

August, 14 A. D. There was, and can be, but one nineteenth day of August in this year which is completely and exclusively attributed to Augustus Caesar, as the forty-third canonical and historical last year of his reign. If this first autocrat over Egypt and lord over the whole then-known world had died on the nineteenth day of the August of the previous year A. D. 13, he would unconditionally have failed to survive either the first of Thoth or the last of the epagomenae of the year Nab. 761, and would just as inexorably have excluded himself from a claim to forty-three years, as if he had been removed from it by a chasm of a thousand yawning years. Just so the count of the Seleucic year 325 peremptorily forbids the assignment of these historical events to the nineteenth of August, A. D. 13 or J. P. 4726, since the Egyptians or the Jews dispersed throughout Europe, Asia, and Africa, for that matter, did not include that date within the compass of Sel. 325. This Syrian year began on the fourth of October, 13 A. D., and, ending on the third of October, 14 A. D., as categorically excluded the nineteenth of August, 13 A. D., as it included the nineteenth of August, 14 A. D., as the authentic date of the death of Augustus Caesar.

The next and last reappearance of the Seleucic Era as a mode and means of keeping time in the bounds of the epoch under consideration is the year 340. It is mentioned by Eusebius in juxtaposition and interrelation to the fifteenth year of Tiberius Caesar. It purports to be the date of a message sent by the king of Edessa to Jesus, the prophet of Nazareth, in the hour of his rejection by the Jews, and is therefore of the greatest value in determining the time when Jesus proffered to his fellow-countrymen the kingdom of heaven, and they would not have it. We do not, in this instance, intend to indicate the time-limits of his so-called ministry, or even to determine the tragical end of His devoted life. Suffice it to say that, in the consideration of this 340th year of the Seleucidæ as used by the people of Edessa, we intend merely to draw what contributory evidence we may derive from it, as to the true chronological position of that famous and oft-referred to "*fifteenth* year of Tiberius Caesar," in which Jesus of Nazareth indisputably began and conducted his campaign for the kingdom of God, as He denominated the state of religion proclaimed by Him.

The year 340 of Edessa, like the years of the Seleucidæ on the coinage of Tripolis and Damascus, began in the autumn of the Julian year J. P. 4741 or 28 A. D., and terminated in the fall of the following Julian year J. P. 4742 or 29 A. D. It was the fifty-fourth year of the Fifth Calippic Period, or the sixteenth year of the third nineteen-year cycle of this Period. It coincided with the latter half of a Sabbatic-Jubilee year, and therefore

harmonized naturally and normally with the data of Scripture. Being a sixteenth year of a cycle, requiring the intercalation of an entire month, it is additionally a distinguished and a distinguishing year. Its calendric composition contributes materially to the emplacement of its correlative marks of time. Having so distinct a coincidence of time-determinants, and leaving so narrow a margin not overlapped by each other, the year of the Seleucidae 340 and the fifteenth regnal year of Tiberius Caesar may be said almost to tally or square with one another. This being the case, the fifteenth of Tiberius cannot well be removed bodily to the site or locality of the preceding twelvemonth, as proposed by Dr. Jarvis and others, nor to the place of a posterior year, say two whole twelvemonths later, as proposed by Dr. Seyffarth and others. In either case, the firmly-fixed Syrian year and the transplanted Roman imperial year will not tally. There is only one position in which the two will square perfectly, that is to say, as perfectly as it is possible for them to do. The fifteenth of Tiberius beginning in 28 A. D. on the twentieth of August, according to the Julianized Roman calendar, or in Nab. 776 on the sixteenth of August, according to the canonical Egyptian calendar, of course commenced respectively fifty or fifty-four days before the Syrian calendar of Sel. 340, but in the main coincided. It is therefore well defined by the 340th year of the Seleucidae, and forever fixed to its rightfully acknowledged place 28-29 A. D.

There being no more instances of Seleucic reassertion, though scattered widely, within the reach of the Jewish-Roman or Asmonean-Herodian epoch [which, be it remembered, is strictly the limit of our investigation], and having now given a complete outline of the data furnished by the era of the Seleucidae within the frame of the third, fourth, and fifth Calippic Periods, it is now incumbent on us to acquire as good an understanding of the inner construction of the years of this chronological metron as it is possible for us to obtain, if they are to constitute the main stays of the calendar to be reconstructed on the strength of these data. We trust not only that we may say with Dr. Wieseler (in his *Excursus on the Form of the Jewish Year*), that we have contributed something toward "furnishing certain fixed historical resting-points, by the help of which we may arrive at a more perfect insight into the nature and construction of the Jewish calendar in the time of Christ," but that we have demonstrated and proven the anchoring grounds of our bridge over the chasm of those times to be so firm and solid that no thought of contraction or expansion by heat or cold can occur to the most meticulous inquirer into chronological truth.

VOLUME II. CHAPTER III

EXCURSUS ON THE FORM OF THE JEWISH CALENDAR

Having surveyed that section of the Seleucic Era to which the calendar we are to rebuild is to be applied, it is now in order for us to acquaint ourselves fairly with what form or manner of framework this proposed calendar should have. Not content with the distribution of the years and days of the Asmonean-Herodian epoch according to the historic structure of the Calippic Periods, we shall now undertake to distribute the 85330 days of that period according to the months and weeks and days which go to make up an ephemeris or almanac. The result will be the Jewish or Syro-Macedonian calendar as it was in use in those days.

In order to reconstruct this ancient calendar with any show of plausibility, we shall have to proceed on certain admittedly correct principles. Following the lead of Dr. Wieseler's *Excursus on the Form and Constitution of the Jewish Calendar* (see *Synopsis*, pp. 421-426), we shall submit the following six rules for observation.

1.) The lunar character of the Jewish year requires that every year shall consist of at least twelve lunations of twenty-nine and one half days each, the months being made to consist alternately of thirty and twenty-nine days, until an ordinary twelvemonth is completed.

2.) The beginning of each month shall coincide with the phasis or first appearance of the moon as closely as a consistent approximation in days of twenty-four hours each will permit.

3.) The difference of eleven and one quarter days between the lunar year of 354 and the solar of $365\frac{1}{4}$, must be adjusted by the insertion in every nineteen-year cycle of seven months of thirty days each and four extra intercalary [quasi-bissextile] days required to offset the four leap-year days incident to every nineteen-year cycle.

4.) The sabbatization or process of counting every seventh year sacred to religious rest must not be permitted to control, i.e. either anticipate or postpone, the location of the seven months and four days of intercalation.

5.) The inauguration of the series of Jewish feasts, or the commencement of the ritual and liturgical calendar of the Jewish temple service, must be arranged from the first day or New Year's day of Nisan.

6.) The official emplacement of the Passover or Paschal feast should be post-equinoctial, since it is the one great festival of the nation celebrated in relation to a certain historical date defined in terms of the Egyptian calendar, the fifteenth of Abib or Epiphi, which did not vary and fluctuate with the oscillation of the moon.

I.

In regard to the first principle laid down by Dr. Wieseler, pertaining to the length of the Jewish year, we have not only the written, documentary testimony of Galenus (Comment. I in *Hippocratis Epidem.* ed. Kuhn, Tom. XVII, p. 23), that the twelve months of the Hebrew year amounted to 354 days, but that is the result we arrive at by the simple process of arithmetic that twelve times twenty-nine and one half days is 354. This, of course, is nothing new. On the contrary, it is chronological lore as old as oriental civilization. All that we need to know about lunar calendars may be drawn from archeological records belonging to the remotest ages of antiquity. Take, for instance, the cuneiform monumental inscriptions of Assyria and Babylonia, which antedated the annals of Media and Persia, Macedonia, and the Maccabean renaissance of the Jewish nation by hundreds of years. The calendric equipment and chronographic facilities of these ancient kingdoms were then well-nigh as perfect as they were in the days of the Roman republic. "Thanks to the lists of the so-called eponyms, by means of whom the Assyrians dated their years," says Prof. A. H. Sayce, *Records of the Past*, Vol. I, p. 1, "the chronology of the Assyrian kings has long since been placed upon a satisfactory footing as far back as the tenth century before our era," and the abundantly authenticated calendar upon which the accurate Assyrian chronology of this hoary age is based is very nearly the form of ephemeris we would like to commend as the basis of the later Jewish or Syro-Macedonian calendar. The Assyrian calendar, which was beyond doubt the very same that was used by the tribes of Israel and Judah when exiled in the Babylonian captivity, was no doubt used by the rescued tribes of Judah and Levi throughout the dark ages of Persian dominion, and is reproduced on the opposite page of the work alluded to precisely like this:

Assyrian, Syro-Macedonian, Jewish Calendar.

<i>Assyrian</i>	<i>Syro-Macedonian</i>	<i>Judean.</i>
1. Ni'sannu	Nisan	March-April
2. Aaru	Iyyar	April-May
3. Sivanu	Sivan	May-June
4. Duzu	Tammuz	June-July
5. Abu	Ab	July-August
6. Ululu	Elul	August-September
7. Tasritu	Tisri	September-October
8. Arakh-savna	Marchesvan	October-November
9. Ki'silivu	Chisleu	November-December
10. Dhabitu	Tebet	December-January
11. Sabadhu	Sebat	January-February
12. Addaru	Adar	February-March
Arakh-makhru	Ve-Adar	

Now, if there were nothing else to be ascertained but the number and names of the lunar months employed by the ancients, there would be no need of losing another minute of our time on this question. But there is confusion galore as to both the number of days in these months and the numbering of these months in a festal or fiscal calendar.

In regard to the number of days in the respective months of the lunar year, the majority of chronologists correctly give the months as alternating thirty and twenty-nine, until the twelve is completed. But Dr. Jarvis, for instance, in his *Chronological Introduction*, pp. 469-477, persists in giving them: Nisan twenty-nine, Iyar twenty-nine and one half, Sivan twenty-nine, Tham-mus twenty-nine and one half, Ab twenty-nine, Elul twenty-nine and one half, Tisri, twenty-nine, Marchesvan twenty-nine and one half, Casleu twenty-nine, Tebeh twenty-nine and one half, Shebat twenty-nine, Adar twenty-nine and one half, and Ve-Adar twenty-nine days. Considering the high character of the venerable protagonist of the anachronistic theory, it is certain that no deception or sleight-of-hand was intended; nevertheless it is a mistake to say that the Jews, Persians, Babylonians, or Assyrians had allotted the thirtieth day accruing to six of their months from the two halves of each pair of adjacent months. His intention evidently was to combine the residuary half-day of the first month with the half-day of the second, under the name and title of the second; the half-day of the third with the half-day of the fourth; the half-day of the fifth with the half-day of the sixth, and so on to the end. The practice of the ancients, however, was just the opposite. They anticipated the half-day of the second month, fourth month, sixth month, etcetera, and added it to the half-day of the first month, third month, fifth month, etcetera, so producing the thirtieth day of the first, the

thirtieth of the third, the thirtieth day of the fifth month, and so forth. And this is not due to a mere predilection or prejudice. For we are apprised of a thirtieth day of Nisan (II Macc. XI. 30), but never of a thirtieth day of Iyar, their preference being rather in favor of a slight anticipation than for a prolonged procrastination. Nor is their preference ill-founded, seeing that, this anticipation only counter-balanced the belated registration of each neomenia in their calendar. In deference, then, to the ancients' predilection, we are bound, as rebuilders of their handiwork, to acquiesce in the arrangement almost universally accepted, that the odd numbered months were rated full thirty-day units, while the even-numbered months were accounted complete at twenty-nine days each.

II.

As the common lunar year was reckoned to consist of twelve lunations, not in precise astronomical terms of 29d. 12h. 44m. 2s. 50t. 26f. etcetera, etcetera, but in plain every-day round numbers (30d. and 29d. alternately), so each lunar month was not scientifically conterminated with the exact astronomical instant of neomenia, but commenced, as the calendrical sequence determined, in the vicinity of the phasis or first appearance of the new moon. Of course, it appeared intensely desirable to the ancient calendar-makers and keepers to connect the beginning of the month as well as their year as closely as possible to the phenomena of the heavens (witness their desire to do this in every little anticipation in the adjustment of their calendar and cycle), but this laudable desire must not be debased into a wish which is father to the thought that astronomical instant and ocular appearance had been made to coincide in every case. However correct and business-like the idea may appear to the modern maker of almanacs, we must oppose this presumption of the overzealous advocate of science quite as much as we reject the tawdry tradition, repeated by Dr. Jarvis, Mr. Page, Prof. Totten, and others, that pastoral watchmen on the mountains assumed the role of actual observers, who, at the moment of discovery, signalled the fact to the priests, who then proclaimed the phenomenon from the house-tops, and then put the beginning of the month on record in the public registers. One extreme is as fatal to the truth as the other, but the more insidious of the two is the one which must be most strenuously guarded against. The hypothesis which suggests coincidence with astronomical nicety has the glamor of science to enthrall the trusting, but the sober study of history records it as a solemn matter-of-fact that, taking Caesar's reformed calendar as an example, "a difference

of from one to two days will invariably be found between that (i.e. Caesar's arrangement of the solar and lunar cycles), and the Nicene computation [and for that matter, most modern recalculations by up-to-date astronomers]; but this, it is believed, only shows the progress which astronomical science had made between Caesar's time and the fourth century after Christ." (Cf. Jarvis, *Chron. Introd.*, Preface, p. IX, 4 p. 433n). The truth is, this shows not only the progress made by astronomical science, but also the amount of error into which a modern recalculation of ancient dates can be seduced by the blandishments of science when non-understood facts are replaced by more brilliant conjectures of theory. In attempting the arduous task of recovering and reconstructing the Jewish calendar, however imperfect and apparently inadequate it may seem to us, we shall, therefore, accept and adopt the second principle laid down by Dr. Wieseler to the effect that the beginning of each month shall synchronize with the phasis of the moon just as closely, but not more so, than a consistent sequence of alternately thirty and twenty-nine days of twenty-four hours each will permit.

III.

By way of laying down the third principle to be observed in the reconditioning of the Jewish calendar, Dr. Wieseler deposes: "As the ordinary year contained 354 days, it was about eleven and one fourth days too short when compared with the solar year. The intercalary month of thirty days was therefore usually introduced every three years, and sometimes in the second year. It was always intercalated after the first Adar." As this deposition contains more than one statement either obscure or obviously erroneous, it will be necessary to discuss it sentence by sentence.

The first statement as to the amount of discrepancy between the lunar and the solar year is unequivocally correct. It is fully as accurate and precise as it needs to be for our purpose, since the aboriginal architects of the Assyrian, Syro-Macedonian or early Judean calendar certainly did not operate on the infinitesimal fractions of time with the aid of higher mathematics, but were content with the employment of integers or whole units and the use of plain, simple arithmetic. According to the rules of arithmetic and in conformity with the face valuation of calendric factors, which alone are patent to the eye and therefore exposed to publicity, the difference between a regular lunar year of 354 days and a regular solar year of $365\frac{1}{4}$ days amounted annually to eleven and one fourth days, an amount sufficiently accurate to be taken into consideration by ordinary men in an ordinary lifetime of threescore years and ten. With respect to the quarter of a day or the balance of six hours, we have grown

accustomed to the equation every fourth year by the regular insertion of the bissextile or leap-year day: the equation of the eleven days by means of previously scheduled intercalary months is not so familiar, even to users of a lunar almanac. Anyone desiring to see how the so-called molad or neomenial instant works its way through a nineteen-year lunar cycle, may see the process exhibited on pages forty-two to forty-four of Prof. Totten's *Our Race*, Series IV, No. 16. However, exception must be taken to our employment of such a scientific tracing of the molad, since our object is not the verification of the highly refined modern Jewish calendar, but the rehabilitation of the ancient Jewish almanac as it was used, perfect or imperfect, by the Jewish people around the beginning of the Christian era. We therefore may not employ the factor as given in Prof. Totten's exhibition of the case. "10d. 21h. o.m. 16s. 47.88179t," but must confine ourselves to a display of the elementary process as it was executed by the priests or prophets of those days. To this end we propose to present the method probably used, keeping the process by which the extra intercalary days needed to offset the bissextile or leap-year days separate from the procedure by which the month necessary in three years or so to counterbalance the excess of the Julian solar years over the Jewish lunar years. Thus:

TRACING THE MOLAD.
(Wrong Way).

	1.	11 days	6 hours.
	2.	+11	+ 6
		<hr/>	<hr/>
		22	12
	3.	+11	+ 6
		<hr/>	<hr/>
		33	18
I.		-30	
		<hr/>	<hr/>
		3	
	4.	+11	+ 6
		<hr/>	<hr/>
		14	24
		+ 1	-24
		<hr/>	<hr/>
		15	0
	5.	+11	+ 6
		<hr/>	<hr/>
		26	6
	6.	+11	+ 6
		<hr/>	<hr/>
		37 (!)	12
II.		-30	
		<hr/>	<hr/>
		7	
	7.	+11	+ 6
		<hr/>	<hr/>
		18	18
	8.	+11	+ 6
		<hr/>	<hr/>

TRACING THE MOLAD.
(Right Way).

	1.	11 days	6 hours.
	2.	+11	+ 6
		<hr/>	<hr/>
		22	12
	3.	+11	+ 6
		<hr/>	<hr/>
		33	18
I.		-30	
		<hr/>	<hr/>
		3	
	4.	+11	+ 6
		<hr/>	<hr/>
		14	24
		+ 1	-24
		<hr/>	<hr/>
		15	0
	5.	+11	+ 6
		<hr/>	<hr/>
		-26	6
		30	
II.		<hr/>	<hr/>
		- 4	
	6.	-11	6
		<hr/>	<hr/>
		7	12
	7.	+11	+ 6
		<hr/>	<hr/>
		18	18
	8.	+11	+ 6
		<hr/>	<hr/>

TRACING THE MOLAD.
(Wrong Way).

	$\begin{array}{r} 29 \\ + 1 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$	$\begin{array}{r} 24 \\ -24 \\ \hline 0 \end{array}$
III.		
	$\begin{array}{r} 0 \\ +11 \\ \hline 11 \\ +11 \\ \hline 22 \\ +11 \\ \hline 33 \\ -30 \\ \hline 3 \end{array}$	$\begin{array}{r} 24 \\ -24 \\ \hline 0 \\ + 6 \\ \hline 6 \\ + 6 \\ \hline 12 \\ + 6 \\ \hline 18 \end{array}$
9.		
10.		
11.		
IV.		
	$\begin{array}{r} 3 \\ +11 \\ \hline 14 \\ + 1 \\ \hline 15 \\ +11 \\ \hline 26 \\ +11 \\ \hline 37 (!) \\ -30 \\ \hline 7 \\ +11 \\ \hline 18 \\ +11 \\ \hline 29 \\ + 1 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$	$\begin{array}{r} 24 \\ -24 \\ \hline 0 \\ + 6 \\ \hline 6 \\ + 6 \\ \hline 12 \\ + 6 \\ \hline 18 \end{array}$
12.		
13.		
14.		
V.		
	$\begin{array}{r} 37 (!) \\ -30 \\ \hline 7 \\ +11 \\ \hline 18 \\ +11 \\ \hline 29 \\ + 1 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$	$\begin{array}{r} 12 \\ + 6 \\ \hline 18 \\ + 6 \\ \hline 24 \\ -24 \\ \hline 0 \end{array}$
15.		
16.		
VI.		
	$\begin{array}{r} 30 \\ -30 \\ \hline 0 \end{array}$	$\begin{array}{r} 0 \end{array}$
17.		
18.		
19.		
VII.		
	$\begin{array}{r} 33 \\ -30 \\ \hline 3 \end{array}$	$\begin{array}{r} 18 \end{array}$

TRACING THE MOLAD.
(Right Way).

	$\begin{array}{r} 29 \\ + 1 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$	$\begin{array}{r} 24 \\ -24 \\ \hline 0 \end{array}$
III.		
	$\begin{array}{r} 0 \\ +11 \\ \hline 11 \\ +11 \\ \hline 22 \\ +11 \\ \hline 33 \\ -30 \\ \hline 3 \end{array}$	$\begin{array}{r} 24 \\ -24 \\ \hline 0 \\ + 6 \\ \hline 6 \\ + 6 \\ \hline 12 \\ + 6 \\ \hline 18 \end{array}$
9.		
10.		
11.		
IV.		
	$\begin{array}{r} 3 \\ +11 \\ \hline 14 \\ + 1 \\ \hline 15 \\ +11 \\ \hline 26 \\ +11 \\ \hline 37 \\ -30 \\ \hline 7 \\ +11 \\ \hline 18 \\ +11 \\ \hline 29 \\ + 1 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$	$\begin{array}{r} 24 \\ -24 \\ \hline 0 \\ + 6 \\ \hline 6 \\ + 6 \\ \hline 12 \\ + 6 \\ \hline 18 \end{array}$
12.		
13.		
V.		
	$\begin{array}{r} 37 \\ -30 \\ \hline 7 \\ +11 \\ \hline 18 \\ +11 \\ \hline 29 \\ + 1 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$	$\begin{array}{r} 12 \\ + 6 \\ \hline 18 \\ + 6 \\ \hline 24 \\ -24 \\ \hline 0 \end{array}$
14.		
15.		
16.		
VI.		
	$\begin{array}{r} 30 \\ -30 \\ \hline 0 \end{array}$	$\begin{array}{r} 0 \end{array}$
17.		
18.		
19.		
VII.		
	$\begin{array}{r} 33 \\ -30 \\ \hline 3 \end{array}$	$\begin{array}{r} 18 \end{array}$

From the foregoing schedule it will be seen that the years of the nineteen year cycle, which were intercalated to fetch the lunar count up to the solar, were the third, fifth, eighth, eleventh, fourteenth, sixteenth, and nineteenth, for the following reasons. Seeing that the insertion of three times eleven days carried the beginnings of the months three days beyond their respective astronomical instants, and six times the insertion of eleven days would land the novilunar feasts [$6 \times 11 = 66 - 60 =$] six days, i.e. almost a week or the fourth part of a month beyond the astronomical instant, with the excess of time increasing rather than diminishing, the ancient almanac makers preferred to anticipate the intercalation as soon as the difference between lunar and solar time had reached twenty-four or more days, when every successive month would automatically bring the "firsts" of each month closer and closer to the astronomical neomenia; consequently in the fifth year of the cycle rather than the sixth, when the undesired opposite would be the case. In the same manner, seeing that seventeen times eleven days would precipitate the first days of the months into an excess of seven days ahead of solar time in the seventeenth year of the cycle, they preferred to inject the intercalary month in the earlier sixteenth year, when a deficiency of only four days would have to be overcome, and would spontaneously be overcome by the natural flow of tide and time. They were therefore justified in executing their calendric equations in the years as stated by the *Encyclopedia Britannica*, rather than in those as stated by Prof. Totten (*Our Race*, No. 16, p. 38) and modern Jewish authors, to wit, the third, fifth, eighth, eleventh, fourteenth, sixteenth, and nineteenth, rather than the third, sixth, eighth, eleventh, fourteenth, seventeenth, and nineteenth. It cannot be denied that the Maccabean high-priests, upon their first adoption of the Seleucic system of keeping time, did apply, for one or two cycles, the primordial method of Meton himself, "who," says Prof. Totten, "made every third year intercalary and ended his cycle with another intercalary year, i.e., his eighteenth and nineteenth year were both intercalary." But when they had once adapted the Syro-Macedonean calendar or revived the Assyrian-Babylonian-Persian calendar to their own needs, the schedule for the equation of time called for the intercalation of seven embolismic months of thirty days each in the third, fifth, eighth, eleventh, fourteenth, sixteenth, and nineteenth years of the cycle.

The equation of the quarter-day solar time with the lunar is not so simple. It appears that the four days accruing from the $19 \times \frac{1}{4}$ necessary to counterbalance the four bissextile days of as many Julian years, were inserted (as will be shown at length in the first, second, fourth, and eleventh year of the nineteen-

year cycle. The reason seems to be this. When Meton's cycle was first put in use (and each Metonic cycle began eight years before the commencement of a Calippic nineteen-year lunar cycle), no attention had been paid to the fraction in the excess of eleven and one fourth days of solar time over the lunar, until, at the close of the eighth year, it was found that two whole days (or forty-eight hours) had accumulated, which had to be paired off with the two day's deficiency in eight years. ($11 \times 8 = 88$; $30 \times 3 = 90 - 88 = 2$). So an extra intercalary day was inserted in the ninth year of the Metonic, but first year of the Calippic nineteen-year cycle. A second extraordinary intercalary day was inserted in the following year (as will be demonstrated later on). A third intercalary day was not inserted until the fourth year, because the fourth embolismic month in the eleventh year of the Metonic cycle equated solar and lunar time almost perfectly. In consequence of this apparent equilibrium, too, it appears that the fractions of time were again neglected, until, near the approaching end of the Metonic cycle (its eighteenth year), thirty-six hours had again accumulated, which made a fourth intercalary day necessary in the nineteenth year of the Metonic, but eleventh year of the Calippic cycle. Proof for these assertions will be furnished in later arguments concerning certain pivotal dates.

The last declaration of Dr. Wieseler in regard to the principles of equalizing solar and lunar time, viz. that the embolismic month was "always intercalated after the first Adar," is of such a character that it deserves a disposition commensurate with its importance. A little reflection over the fact that he has the product of later ages in mind, namely the modern Jewish calendar, which was constructed "in accordance with the rule of the Talmud," and must therefore be construed to be the last word in calendar-construction, must convince any thinking man that, before the innovation referred to was introduced, something else, haply something faulty and inferior, existed in its place. For if a decided improvement was made, or a decided advantage was gained, by the emplacement of the intercalating process in the prime season of the year (near the vernal equinox), it stands to reason that the place of equation must have been shifted from another place, where it was supposed to labor under a disadvantage or to the detriment of correct time-keeping. But this is no mere inference. That the chronological site of intercalation has, in different ages and in different stages of the world's experience, been located in different parts of the fiscal year, is a matter of fact recorded in history. In late ancient times, and especially in the epoch we are now examining, the men of Judea preferred, in unison with all the other nations under the influence of the

Seleucidae, to insert their embolismic month in the late summer or early autumn, calling this extra lunation "the second Elul." In still remoter ages of antiquity, the tribes of Israel as well as the Babylonians who had enslaved them, employed sometimes a spring, sometimes a fall intercalation. For the benefit of those to whom this arrangement may appear an innovation or even a new invention, we shall cite a few statements from *Records of the Past* (edited by Prof. A. H. Sayce of Oxford, England), which will utterly destroy the will o' the wisp of novelty. Relating first to the second month of Adar, which was actually in vogue in 544 B. C., a contract recorded at Babylon was dated thus: "the twenty-seventh day of the *second* Adar, the twelfth year of Nabonidos, king of Babylon." (*Records*, Vol. III, p. 127) But even older than this, a document relating to Merodach-nadinakhi, the son of the king [Nebuchadrezzar] was dated: "Babylon, the eighth day of the *second Elul*, the forty-first year of Nebuchadrezzar, king of Babylon." (*Records*, Vol. V, p. 143) This was about 564 B. C. Consequently, as early as the sixth century B. C., the insertion of an extra lunation after Elul, in the late summer or early autumn, was recognized as legal and practiced as calendrically correct. And not to have this argument waved aside as irrelevant and foreign to the subject, let us appeal once more to these *Records of the Past* for confirmation of the suggestion that the Jewish and the Babylonian almanacs were really one and the same. There, on front pages of Vol. I and III, we shall find copies of the ancient Assyrian calendar as similar to the later Syrian calendar as two peas grown in the same pod. Here is a copy:

<i>Assyrian—Syro-Macedonian—Judean.</i>		
1. Ni'sannu	Nisan	March-April
2. Ayru	Iyyar	April-May
3. Sivanu	Sivan	May-June
4. Duzu	Tammuz	June-July
5. Abû	Ab	July-August
6. Ululu	Elul	August-September
	Ve-Elul	
7. Tasritu	Tisri	September-October
8. Arakh-savna	Marchesvan	October-November
9. Ki'silivu	Chisleu	November-December
10. Dhabitu	Tebet	December-January
11. Sabadhu	Sebat	January-February
12. Addaru	Adar	February-March
Arakh-makhru	Ve-Adar	

To visualize the ease with which either the vernal or the autumnal location might be selected as the site of intercalation, let us tabulate the months of the Jewish calendar both according to the Babylonian and the Syro-Macedonian form of registration,

using the Arabian figures for the former and the Roman numerals for the latter.

1. Nisan	VII. Xanthicus
2. Iyar	VIII. Artemisius
3. Sivan	IX. Daesius
4. Tamuz	X. Panemus
5. Ab	XI. Lous
6. Elul	XII. Gorpiaeus
6. Ve-Elul	Dioscorus
7. Tisri	I. Hyperberetaeus
8. Marchesvan	II. Dius
9. Casleu	III. Apellaeus
10. Tebeth	IV. Audynaesus
11. Shebat	V. Peritius
12. Adar	VI. Dystrus
Ve-Adar	

And, lest anyone fancy that an autumnal complementation of the lunar year is a mere makeshift of calendrical expediency, let us be permitted to submit here the conclusive argument of Prof. Totten in its favor, showing not only the astronomical beauty and fitness of the arrangement, but also the wisdom and admirable understanding of the ancients in this matter. In No. 16 of his serial *Our Race*, pp. 54-57, Prof. Totten defends and fortifies his intercalary position in the fall of the year thus:

"The Revolution of the Year."

"The astronomical arrangement of the ecliptic, itself, to the equator, fixes the normal *beginning* of the soli-lunar year and cycle beyond all controversy. We refer to a purely chronological measure which cannot be disputed. Nevertheless, while it has always been recognized as a fact in the arrangement of the seasons it has never been detected as a probable determinant of the original 'molad' of the primeval calendar so far as we now know. Let us illustrate the matter by citing from an almanac of 1896 A. D.

The Beginning of the Seasons.

Winter Solstice,	1895,	beginning of Winter,	December 21,	8 p. m.
Vernal Equinox,	1896,	beginning of Spring,	March 19,	9 p. m.
Summer Solstice,	1896,	beginning of Summer,	June 20,	5 p. m.
Autumnal Equinox,	1896,	beginning of Autumn,	September 22,	8 a. m.
Winter Solstice,	1896,	beginning of Winter	December 21,	2 a. m.

Duration of the Seasons.

Sun in Winter signs,	89d. 1h.	Tropical Year,	365d. 6h.
Sun in Spring signs,	92d. 20h.	Sun North of Equator,	186d. 11h.
Sun in Summer signs,	93d. 51h.	Sun South of Equator,	178d. 19h.
Sun in Autumn signs,	89d. 18h.	Difference,	7d. 16h.

"Now the most ancient year (lunar as well as solar) is known to have been *Autumnal* in its origin. Volumes of testimony could be adduced in recognition of this fact, and by the peculiar adjustment of the ecliptic to the equator, and the passage of the sun through it, the Vernal Equinox occurs normally just half a lunar year after the Autumnal Equinox, i.e. six lunations after the point where the soli-lunar year begins. This is one of the most beautiful *chronological* adjustments to be found in the heavens, and its utility drops entirely out of sight if the Lunar year is adjusted to, and forcibly measured from any other point than the Autumnal Equinox! (Vide Haliburton, Proctor, Smyth, et al.)."

If, then, there is any doubt in the mind of anyone as to the proper place in the Jewish calendar where a natural opening in the ecliptic presented itself for occupation, and of which the officiating pontiff or priest availed himself in the selection of a site for the necessary insertion of the embolismic month, we pledge ourselves to prove on the spot where the equation of lunar with solar time is required when we get to the dates involving the intercalation of an embolismic lunation. But whatever or wherever the site, whether in summer or winter, spring or autumn, in other ages and in other regions of the world than Judea in the time of Christ, we repeat, in the centuries preceding and succeeding the starting-point of the Christian Era, and in the land of Israel known as "the Jewish world," the natural and normal intercalary locations were the late summer or early autumn days of the third, fifth, eighth, eleventh, fourteenth, sixteenth, and nineteenth years of the Calippic nineteen-year lunar cycles.

IV.

The *fourth* principle to be observed in the reconstruction of the Jewish calendar used near the beginning of the Christian Era, is another case of opinion in which we cannot concur with the venerable doctor Wieseler. The sabbatization of every seventh year, like the sabbatization of every seventh day, does not interfere or conflict with the secular arrangement of the calendar or the calendar-cycle. The ritual of making Sabbath-days, Sabbath-weeks and Sabbatic years of certain elements of the Jewish calendric system does not tamper with, still less control, the order or arrangement of calendric factors. Neither does the secular institution known as an almanac or ephemeris, attack or militate against ritual appointments known as feasts or festivals. The idea that calendric conditions dictated by nature must yield to certain demands of a religious character, would, if carried out consistently, play havoc with any calendar with any pretensions

to systematic order and propriety. Take, for instance, the case of the "seventh" or Sabbatic years, in the course of which no intercalation is alleged to have taken place. If this series of consecrated years was consistently executed so that none of the twenty-two Sabbatic years comprised in the scope of the 233 years, for which we are trying to reconstruct a plausible calendar, was ever dislodged, while all the intercalations of embolismic months in conflict with the holiday-years were summarily anticipated or categorically postponed, there must have been, at least, some nine or ten encounters of this kind (to wit, 141, 106, 57, 43, 22, and 8 B. C., and the years 7, 28 and 42 A. D.), yet not one word to enlighten us on the nature of the arrangements made to straighten out the kinks and entanglements produced by such an arbitrary procedure. It is no excuse to say that such disorder was introduced in the interest of divine service and devout contemplation, when no divine decree ordaining such confusion can be produced to back up such disorders. It may be said, as it is said, that the Jews had a cycle of eighty-four years [divisible by seven and therefore supposed to be compatible with the Sabbatarian principle], devised to facilitate the keeping of the records necessary for the use of such a measure. But it is here overlooked that, if this cycle of eighty-four years, so beautifully constructed by the addition of an octoeteride to a Calippic period of seventy-six years, and so beautifully symbolical of the sacred number seven and the tribal number twelve multiplied into each other, is conscientiously carried into effect, this beautiful cycle of eighty-four years must either end in ignominious conflict with its own golden rule, or it must disgracefully expire without a consummation. And in the end, what compensating result is achieved by such a whole twelve-month dislocation of an equation-point. A wholesale expatriation of all the feasts of that sabbatical year from the week-days to which they naturally belong, and a wholesale desecration of all twelve of the feasts of the new moon, which it was their sacred purpose to observe on the instant or as nearly on the point of neomenia as possible, but now deported and expelled to signs of the zodiac altogether foreign and unfriendly to them. No expedient could be put into practice more pernicious and nugatory than such an uncalled for transfer of the site of intercalation. If, then, in the upbuilding of the proposed Jewish calendar, we encounter such a coincidence of a point of equation with a "seventh" or Sabbatic year, let this not deter us from enforcing the provisions of nature for the regulation and re-arrangement of calendric time-keeping, keeping in mind that the observance of natural law is as certainly holy as the supposed injunctions of traditional theology. In both the

maxim holds good: "What God hath joined together, let not man put asunder."

V.

The *fifth* principle laid down by Dr. Wieseler for the recovery and reconstruction of the Jewish calendar, relates to "the beginning or first month of the Jewish festal calendar." As we have seen the original beginning of all lunar calendars derived from the Assyrian prototype and employed by all nations subject to the power and influence, first, of Assyria, and later of Babylonia, Persia, and Macedonia, was the time of the autumnal equinox. This was true of the land of Israel, Coele-Syria, Asia Minor, and all the countries of the Levant. But the Jews were a peculiar people. Being separated from all the rest, they were to have a calendar and ritual of their own. To regulate the religious activities of the nation, the Jewish historian, Josephus, relates (*Antiq.*, B. I, C. III, §3), that "Moses appointed that NISAN, which is the same with *Xanthicus*, should be the first month *for their festivals*, because he brought them out of Egypt *in that month*: so that this month began the year as to all the solemnities they observed to the honour of God, although he preserved the original order of the months as to *selling and buying, and other ordinary affairs*." This means, if it means anything, that, although the original order of the months, before and up to the Exodus, was such that Tisri was accounted the first, Marchesvan the second, Kislev the third, Nisan the seventh, and Elul the twelfth, terminating the year at this point when necessary with an embolismic month, the new Mosaic arrangement of the months made NISAN the first, Tisri the seventh, and Adar the twelfth, without necessarily concluding the year, when called for, with an intercalary month Ve-Adar. This intensely religious hieratic seriation or enumeration of the months was so deeply impressed or rather branded on the souls and consciences of men that they clung to this hierarchical mode of reckoning as if it had always been so accounted, and as if it were intended to be the norm of reckoning "eternal in the heavens." Hence it is that, from its very inception, it is appealed to as the means of computing the various feasts and solemnities of the Hebrew liturgy. "In the fourteenth day of the *first month* at even is the Lord's passover." (Lev. 23:5) "In the *seventh month*," counting from the same point, "in the first day of the month, shall ye have a sabbath, a memorial of blowing of trumpets, an holy convocation." (Lev. 23:24) "Also on the tenth day of this *seventh month* there shall be a day of atonement." (Lev. 23:27) And when they had numbered seven sabbaths of years, even seven times

seven years, or forty and nine years, "then," they were told, "then shalt thou cause the trumpet of the jubilee to sound on the tenth day of the *seventh month*, in the day of atonement shall ye make the trumpet sound throughout all your land." (Lev. 25:9) So it came to pass that, in the series of Sabbatical years, within the scope of the same twelvemonth, the Jews had two beginnings of two sacred years, the first sacred year beginning in Spring, with the month Nisan, the other hallowed year beginning in the fall, with the month Tisri, until, in the year 134 B. C. or Sel. 178, the year of rest, being perforce prolonged to eighteen months, the "Seventh" or Sabbatical years were transferred exclusively to the former, so that the limits of the one-time two sacred years were identical, both extending from Nisan to Nisan or from spring to spring. At the same time, then, that there was a commercial or conventional seriation of months, especially in vogue while the Seleucidae exerted a domineering influence over the Jews, the time arrived, with the political independence of Judea, when the sacred year of the clergy predominated over the secular year of the laity, in such a measure that the latter was almost entirely ignored. It is therefore as advisable as it is convenient to conform to the practice of the Jews of the later Asmonean-Herodian era in conducting our computations in terms of the hieratic calendar in use. If it should become necessary, in the course of these calculations, to consult the Seleucid mode of reckoning the month from the autumnal starting-point because of the purely Gentile character of the date in question, we may readily do so in deference to its original dignity as the primary method since creation.

VI.

The sixth and last principle propounded by Dr. Wieseler with reference to the reconstruction of the ancient Jewish calendar pertains to the post-equinoctial date or chronological site of the Paschal solemnity. He says (*Synopsis*, p. 424): "The Passover was always celebrated *after the vernal equinox*, which at that epoch fell on March twenty-third." . . .

That the Exodus of the Israelites from Egypt, the event to be commemorated by the Paschal feast, happened (if it happened at all) in the prime-time or spring of the year, goes without saying. The question only is, how far afield may the observance of this festival range in a calendar as variable as the Jewish calendar manifestly was. To say that it must be celebrated *in spring* might mean to a Roman, according to the Praenestine Calendar, that it might be observed as early as the ninth of February, for that, says the connotation, was the beginning of

spring. Obviously the date requires a more stringent definition. To guard against too early a celebration of the Passover, as it might be brought about by the neglect or wilful omission of an intercalary month, it is variously defined by authorities on the subject. Since there was no stabilized solar calendar in existence before Julius Caesar's time, and even that was not universally recognized in the countries of the Levant, there seems to be a hopeless contradiction in the terms of the next best system of time-keeping. The next best system employed to do this is the ancient Egyptian scale of time known as the Nabonassan Era, with its vague year of 365 days, or twelve months of thirty days each and five additional days known as *epagomenae*. Appealing to this computation of time, the author of the books of Moses known as Exodus and Deuteronomy affirms most emphatically that the liberation of the Israelites from Egypt occurred *in the month Abib* (Ex. 13:4 and 23:15). To stress this statement a little more, he says (in Ex. 34:18): "The feast of unleavened bread shalt thou keep. Seven days thou shalt eat unleavened bread, as I commanded thee, *in the time of the month ABIB*; for *in the month ABIB* thou camest out from Egypt." And to drive this fact home with still greater force, he repeats his description of the date in Deuteronomy thus: "Observe the month ABIB, and keep the passover unto the Lord: for *in the month of Abib* the Lord thy God brought thee forth out of Egypt by night." (Deut. 16:1).

Yet, in spite of this repeated and highly emphasized assertion of the sacred scripture writer, Josephus and later authors insist, with equal emphasis and positiveness, that the Exodus occurred in the month *Pharmuthi*. The explanation of this apparent contradiction is this, that by virtue of the constantly and regularly operating prolepsis of the vague Egyptian year, that month which had witnessed the historic event had imperceptibly slidden from its moorings in the far distant past, and another month, the month of *Pharmuthi*, had slipped into its berth. The month ABIB Coptic EBEEB, Graecised EPIPHI, was indeed the historic month in which the deliverance of the children of Israel took place, but, lapsing a day every four years, it could not hold its position longer than ($4 \times 30 =$) 120 years, when it dropped completely out of place as the paschal lunation to make way for the next month, Messori or Misra. Eight months of 30 days each and 5 days called *Epagomenae* successively slipped thus into position to serve as the approximate paschal date for a century and over. Then, at the end of the first century B. C. and almost the whole of the first hundred A. D., the month *Pharmuthi* or *Burmoodée* (as it is called in Coptic) slid into the ways of dating the Passover, furnishing the phraseology of Philo, Josephus and Musaeus regarding the Paschal feast, and of Anatolius and Epiphanius regarding the Vernal Equinox.

The definition, then, which confines the chronological site of the Pascal date to the month Pharmuthi, from 34 B. C. to 90 A. D., is as pertinent and to the point as a date in terms of the Egyptian calendar can be. But, being a vagrant, it was needful that some other chronological element be added to this definition to tie it down to the same point of the solar or natural year. So Josephus, for instance, writing his *Antiquities* in the thirteenth year of the reign of Domitian, commits himself thus (*Ant.*, II. 14, §6): "But when God had signified that with one more plague he would compel the Egyptians to let the Hebrews go, he commanded Moses to tell the people that they should have a sacrifice ready, and that they should prepare themselves *on the tenth day of the month Xanthicus, against the fourteenth* (which month is called by the Egyptians *Pharmuth*, and *Nisan* by the Hebrews; but the Macedonians call it *Xanthicus*) and that he should carry away the Hebrews with all they had." And, again, in *Antiq.*, III, X. 5, "*In the month of Xanthicus, which is by us called Nisan, and is the beginning of our year, on the fourteenth day of the lunar month, when the sun is in Aries* (for in this month it was that we were delivered from bondage under the Egyptians), the law ordained that we should every year slay that sacrifice which I before told you we slew when we came out of Egypt, and which was called the Passover."

Such being the calendric conditions in the days of Josephus, who was born just about the time when Tiberius Caesar and Pontius Pilate stepped down and out of the period made memorable by the passion and crucifixion of Jesus Christ, we obtain through his testimony two additional elements of chronology which certainly tend to locate the site of the Passover festive season in the century then expiring—the pivotal point of the Vernal Equinox and the zodiacal sign of Aries. Two other authorities, because nearly contemporary with Jesus Christ, are cited by Dr. Wieseler as in agreement with the Jewish historian of that century, Philo Judaeus and Musaeus, but "the earliest and most important evidence," as to these factors is contained in a fragment of the *Canon Paschalis* of the learned Anatolius, bishop of Laodicea, in the third century, preserved by Eusebius (*Hist. Eccl.* VII. 32). It is this:—

(14) "It has therefore in the first year the new moon of the first month, which is the beginning of the whole nineteen-year cycle, *on the twenty-sixth of Phamenoth* according to the Egyptians, but according to the months of the Macedonians *the twenty-second of Dystrus*, or, as the Romans would say, *the eleventh before the Kalends of April* [the twenty-second of March]. (15) The sun is found on the aforesaid twenty-sixth of Phamenoth not only to have arrived at the first sign of the zodiac, but al-

ready to be passing through the fourth day within it. This sign is commonly called the first of the twelve divisions and the equinoctial [sign] and the beginning of months and head of the cycle and the starting-point of the planetary course. But the preceding [sign] is the last of the months and the twelfth sign and the last of the twelve divisions and the end of the planetary circuit. Therefore we say that they who place the first month in it, and determine the fourteenth day of the Pascha accordingly, are guilty of no small or ordinary mistake. (16) And this is not our own statement, but the fact was known to the Jews, those of old time even before Christ, and it was carefully observed by them. One may learn it from what is said by Philo, Josephus and Musaeus, and not only by them but also by those of still more ancient date, the two Agathobuli, surnamed the Masters, and Aristobulus the Great. . . . (17) These [writers], when they resolve the question relative to the Exodus, say that all equally ought to sacrifice the *Passover after the vernal equinox, at the middle of the first month*; and that is found to occur when the sun is passing through the first sign of the solar, or, as some have named it, the zodiacal cycle. And Aristobulus adds that at the feast of the Passover it is necessary that *not only the sun should be passing through an equinoctial sign, but the moon also*. (18) For as the equinoctial signs are two, the one vernal, the other autumnal, diametrically opposite to each other, and as *the fourteenth of the month*, at evening, is assigned as *the day of the Passover*, the moon will have its place in the station that is diametrically opposed to the sun, as may be seen in full moons; and the one, the sun, will be in the sign of the vernal equinox, while the other, the moon, will of necessity be in that of the autumnal. (19) I know many other statements of others, some of them probable, others advanced as absolute proofs, by which they attempt to establish that *the Feast of the Passover and of unleavened bread ought without exception to be held after the equinox*."

That this important national holiday of the Hebrew people *was* always, and of right *ought to be* always, observed in solemn celebration *after the vernal equinox*, we are not in a position to say. That, thank God! we are not called upon to decide. What we are expected to do—and that is abundantly sufficient for one essay—is to establish and stabilize the date of Easter, the chronological heir and successor of the one Passover at which Christ died, in conformity with the facts, as discovered and demonstrated by the historical evidences of the first Christian century. These facts may be easily verified.

In the first place, the dates given above may be readily shown to demand recognition of these principles. The date of the Passover new moon, assigned by Anatolius to the eleventh before the

Kalends of April (or the twenty-second of March), being the eighty-first day of a common Julian year, and the twenty-sixth day of the contemporary Egyptian month Phamenoth, was the 236th day of the vague Egyptian year, which began, for four consecutive years, on the $(236-81=155)$ 154th day of the Julian year reckoning from the end. This day, then, the 154th from the end, but the $(365-154=)$ 211th from the beginning of the year, was the 1st of Thoth, or the New Year's day of the Egyptian year, in 95, 96, 97 and 98 A. D. In these four years of the Julianized Roman calendar, accordingly, the 211th day (or the thirtieth of July) began the specific Egyptian year whose 236th day (or twenty-sixth of Phamenoth) corresponded to the twenty-second day of March and the twenty-second day of Dystrus or Adar, respectively in the Roman and Jewish calendars. Adding to March twenty-second, the eighty-first day of the Julian year, the first fourteen days of the month Xanthicus or Nisan, we arrive at the ninety-fifth day of the year (or the fifth day of April), as the correct date of the Pascal feast in this case, in the year 98 A. D., when according to specifications it fell first, into the Egyptian month Pharmuthi; secondly, some ten or eleven days after the Vernal Equinox (then located on the VIIIth before the kalends of April (or March twenty-fifth), and thirdly, a distance of eighteen to nineteen days within the domain of the zodiacal sign Aries. And as the date of the Passover in 98 A. D. projected well into the heart of April and Pharmuthi as well as the sign Aries, so it penetrated deeper and deeper into, through and out of, both the sign Aries and the month April as the month Pharmuthi retrogressed in proper sequence to the Egyptian New Year's day on the first of Thoth. For as the first of Thoth lapsed day by day quadriennially through the month of August, then July, then June, and so forth, so that month of Pharmuthi slid slowly through the month of April and the sign Aries, until, within the course of the first Christian century, the first of Thoth had reached the month of July and the last of Pharmuthi had passed the closing days of March. If, then, as in ancient times, the date of the Passover had been dependent solely on its connection with the Egyptian month Pharmuthi, the paschal feast would have been bodily conveyed during the following century into the preceding month March; in the next succeeding century into February, and, in the next again, into January, and so forth, and so forth. But for the timely enactment of preventative measures, such as the limitation to the sign of Aries and the site of the equinox, the Passover date would have shifted [as did the month *Abib*] ahead of its proper place, first, to the twelfth sign of the zodiac, then to the eleventh, then to the tenth, and so forth, to the bitter end. But thanks to the

wise Passover regulations laid down above this old historic holiday was confined to the vicinity of the vernal equinox and the bounds of the zodiacal sign Aries.

In order to visualize the extent of the mischief and harm a disregard of this calendric principle would work in the no doubt well-meant endeavor to reconstruct the Jewish calendar, let us note the results of such neglect in the work of two distinguished and outstandingly painstaking students of biblical chronology—those of Mr. Wm. M. Page in his *New Light from Old Eclipses* (pp. 241–246) and of Prof. Chas. A. L. Totten in his serial *Our Race*, No. 16, pp. 378–382.

The first instance of this kind by Mr. Page is valuable as illustrating the reason why such an aberration from historical facts is possible—the detached, isolated, disconnected, and fragmentary character of this supposititious Jewish calendar. It shows no connections with anterior or posterior dates in the history of those times, and therefore does not display the mode or method of shifting a whole month out of its proper place to a site to which it does not belong. It is like the biblical character and life-term of Melchisedec, king of Salem, who met Abraham returning from the slaughter of the kings; “without father, without mother, without descent, having neither beginning of days, nor end of life.” (Hebr. 7:1.3) There is a lamentable lack of evidence to prove that the calendar, as adjusted to 28 and 29 A. D., has been placed in its proper bearings. It does show, however, that its Passover is switched to the month of March, even onto the last day of the sign Pisces; that its feast of Tabernacles before it was swept into the month of September, even before the autumnal equinox; and the feast of the Dedication, accordingly, is transported out of the winter month December into the autumnal November, notwithstanding the fact that the inspired evangelist says expressly and distinctly that “it was winter.” (John 10:22)

This shortcoming of Mr. Page is somewhat made good by his disciple and successor, Prof. C. A. L. Totten. With admirable frankness, this phenomenally industrious man has expatiated on the theories of Mr. Page and glaringly exposed the egregious faults of their ill-advised system. Working out his 19-year cycles month by month, giving the initial date of each with its week day designation, he submits the 311th of his cycles (1899 to 1911 A. D.) as corresponding in its fifth year [1896–7 A. D.] to that which was in current use at the time when Jesus of Nazareth was crucified and reported risen from the dead, according to their estimation (i.e. Mr. Page’s and Prof. Totten’s), in 28–29 A. D. In this explicit exhibition of all the neomenias contained in a nineteen-year cycle, Prof. Totten exposes to view at least six

beginnings of Nisan, the Passover month, in February, and six more of them in the sign Pisces before the Vernal Equinox! This egregious over-early arrangement of the months not only affects the spring festival of the Pascha, but also forces the fall festival of the Tabernacles and the winter feast of the Dedication into an abortively early position. If there were, or had been, a summer solemnity in the life of Jesus, the date in that season would likewise appear dislodged and dislocated like a fish out of water. In order to enable any reader or observer to scan the havoc created by such a displacement of the Jewish year, we shall cull only the Tishri, Casleu, and Nisan dates of this 311th XIX-Year Cycle.

The 311th XIX-Year Cycle.

I. 1892-3 A. D.	Tishri, Sept. 22	Casleu, Nov. 20	Nisan, Mar. 18
II. 1893-4 A. D.	Tishri, Sept. 11	Casleu, Nov. 9-10	Nisan, Mar. 8-9
III. 1894-5 A. D.	Tishri, Sept. 1-2	Casleu, Oct. 30-31	Nisan, Feb. 24-25
IV. 1895-6 A. D.	Tishri, Sept. 19	Casleu, Nov. 17-18	Nisan, Mar. 15
V. 1896-7 A. D.	Tishri, Sept. 8	Casleu, Nov. 6	Nisan, Mar. 4-5
VI. 1897-8 A. D.	Tishri, Aug. 28-29	Casleu, Oct. 26-27	Nisan, Feb. 22-23
VII. 1898-9 A. D.	Tishri, Sept. 17	Casleu, Nov. 15	Nisan, Mar. 12
VIII. 1899-1900 A. D.	Tishri, Sept. 5	Casleu, Nov. 3	Nisan, Mar. 1-2
IX. 1900-1 A. D.	Tishri, Sept. 24	Casleu, Nov. 22-23	Nisan, Mar. 21
X. 1901-2 A. D.	Tishri, Sept. 14	Casleu, Nov. 12	Nisan, Mar. 9-10
XI. 1902-3 A. D.	Tishri, Sept. 2-3	Casleu, Oct. 31- Nov. 1	Nisan, Feb. 27-28
XII. 1903-4 A. D.	Tishri, Sept. 22	Casleu, Nov. 20	Nisan, Mar. 17
XIII. 1904-5 A. D.	Tishri, Sept. 10	Casleu, Nov. 8-9	Nisan, Mar. 7-8
XIV. 1905-6 A. D.	Tishri, Aug. 31- Sept. 1	Casleu, Oct. 29-30	Nisan, Feb. 25-26
XV. 1906-7 A. D.	Tishri, Sept. 20	Casleu, Nov. 18	Nisan, Mar. 16
XVI. 1907-8 A. D.	Tishri, Sept. 9	Casleu, Nov. 7	Nisan, Mar. 3-4
XVII. 1908-9 A. D.	Tishri, Aug. 27-28	Casleu, Oct. 25-26	Nisan, Feb. 21-22
XVIII. 1909-10 A. D.	Tishri, Sept. 16	Casleu, Nov. 14	Nisan, Mar. 11-12
XIX. 1910-11 A. D.	Tishri, Sept. 4-5	Casleu, Nov. 2-3	Nisan, Feb. 28- Mar. 1

—Totten's *Our Race*, No. 16, pp. 378-82.

Now, without wasting more time on the explanation of errors which so patently expose themselves, we shall now advance to the attack on the citadel of Easter chronology by digging ourselves in *before, behind and all around* this central point, drawing the strangling line of circumvallation tighter and tighter, until there is nothing left but the unconditional surrender of the primordeal, original Passover and Easter date. We mean to effect this consummation devoutly to be wished by constructing, not an ideal, but the real historical calendar of the Jews on the basis of the following list of events, hoping that you, esteemed reader, may find these data, as we have found them, "confirmations strong as proofs from Holy Writ."

List of Well-Dated Events.

1. Period of the Jewish War (Destruction of Temple, etcetera)	268
2. Desecration and Re-Consecration of Temple under the Maccabees	284
3. Victory of Judas Maccabaeus at Bethhoron	297
4. Sabbath-Pentecost of John Hyrcanus	306
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6. Excursus on Reign of Julius Caesar	344
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9. The Nativity of Jesus Christ	380
10. The Passover "when Jesus was Twelve Years old"	459
11. Paul's "Fifteen Days with Peter"	475
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16. Crucifixion and Resurrection of Jesus Christ	546
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VOLUME III. CHAPTER I

THE JEWISH-ROMAN OR ASMONEAN-HERODIAN ERA. PERIOD OF THE JEWISH WAR

Having outlined the borders of all the Calippic Periods, eight in number, from 330 B. C. to 222 A. D. (see p. 223, and narrowed down our lines by limiting our research to the thirteen Metonic Cycles contained in our special field of endeavor, from the ninth to the twenty-second, or, better, from the 148th year of the Seleucidae or 165 B. C. to the 382nd year Seleucidic or A. D. 70 (see p. 224,) let us now attempt a general disposition of the units called "days" constituting both cycles and periods. We have already computed the duration of that part of the ninth nineteen-year cycle which followed the cleansing of the Temple on the twenty-fifth of Casleu or the twenty-second of December, 165 B. C., finding the number of days to have been 1923. Supposing, in the same tentative way, that the number of days in the fractional beginning of the second nineteen-year cycle of the VIth Calippic Period, that is to say, the component parts of Nisan, Iyar, Sivan, Tamuz, and Ab, (Xanthicus, Artemisius, Daesius, Panemus and Lous), to have been 128 days (for which hypothesis we shall give our reasons later), we may itemize our problem and obtain the total of constituent days in the following manner:—

<i>Cal. P.</i>	<i>Met. Cycle.</i>	<i>Sel.</i>	<i>Jul. P. or B. C. and A. D.</i>		<i>Days.</i>
III. ¹	9	148—153	4549	165 B. C.	1923
III. ²	10	154—172	4555	159 B. C.	6940
III. ³	11	173—191	4574	140 B. C.	6940
III. ⁴	12	192—210	4593	121 B. C.	6940
IV. ¹	13	211—229	4612	102 B. C.	6940
IV. ²	14	230—248	4631	83 B. C.	6940
IV. ³	15	249—267	4650	64 B. C.	6940
IV. ⁴	16	268—286	4669	45 B. C.	6940
V. ¹	17	287—305	4688	26 B. C.	6940
V. ²	18	306—324	4707	7 B. C.	6939 !
V. ³	19	325—343	4726	13 A. D.	6940
V. ⁴	20	344—362	4745	32 A. D.	6940
VI. ¹	21	363—381	4764	51 A. D.	6940
VI. ²	22	382—382	4783	70 A. D.	128 !

85330 ds.

That this sum total of 85330 days is absolutely correct may be surmised on the ground that it presents an unbroken and unbreakable series of 12190 weeks, each and every week composed of seven days, never of six, never of eight, but always, uniformly and inexorably, of SEVEN days. And this, this aggregate does in perfect fulfillment of the conditions imposed by tradition and history that this period began with the first day of the week after the reconsecration of the Temple on a Sabbath-day, and finished its course with the burning of the second Temple on an equally certain but sad Sabbath-day. The whole amount of the days composing this epoch of Hebrew history cannot be a day less, nor a single day more, but must be exactly this sum, 85330 days, evenly divisible by seven and leaving no remainder, thus presenting to every man, woman, and child of ordinary intelligence the key or open sesame to the chronology of this period, than which a more dependable and practical could not be desired. To facilitate future calculations we shall here insert a prospectus of the period which we have styled the Jewish-Roman or Asmonean-Herodian era with the seriation of its years all written out.

Before we can conveniently explain the presence of an additional day in the second nineteen-year cycle of the VIth Calippic Period (70 A. D.), and the absence of a day in the second nineteen-year cycle of the Vth Calippic Period (5 B. C.), we must take a previous step or two in the disposition of the 85330 days belonging to all of the cycles put together, the arrangement into common and complemented years and the still smaller regimentation into months, ordinary and intercalary. As the common Julian year of 365 days is quadriennially subject to augmentation by the addition of the bissextile or leap-year day, so the Jewish or Syro-Macedonian cycle of nineteen lunar years is liable by the insertion of four extra-intercalary days to offset the increase in solar time by means of the leap-year days. But, while nineteen Julian years represent almost perfectly the amount of solar time contained in nineteen natural years, the same number of lunar years (as in the Hebrew and Syrian Metonic cycles), not only do not come up to the full measure of time, but fall eleven days short of the duration of a natural nineteen-year cycle. To compensate for this shortcoming of the lunar years, the nineteen-year cycles of lunar chronology must be augmented to the extent of seven intercalary months to each nineteen-year cycle, or eighty-six embolismic months of thirty days each to the entire course of the Asmonean-Herodian Era. This is easily proven. As there are twelve whole Metonic cycles comprised in the era, making $12 \times 7 = 84$, plus two intercalary months included in the last six years of the first (ninth) nineteen-year cycle involved in the Jewish-Roman Era, we have eighty-six embolismic months to

insert in the era according to the principles of calendar construction soon to be discovered and endorsed. The question then is, Where are we to seek the sites, and find the proper places, for the insertion of the requisite intercalary days and intercalary months?

In order to get a clear and clean-cut start on our way toward recovering the form of the calendar and calendar cycle as it was used by the Jews at the time of Jesus, and with it the definite date of His crucifixion and resurrection (Good Friday and Easter), let us start at the end of the Era marked off by the termination of the first nineteen-year cycle of the VIth Calippic Period, and the beginning of the second nineteen-year cycle of the same period. In order to be able to compute even this small fraction of a Metonic cycle, we shall have to take for granted that certain facts as factors of our problem will be admitted as well-known and correct. Thus, it will have to be admitted that Josephus, in giving the names of the months as belonging to the Syro-Macedonian calendar, meant to give us the names as interchangeably used by the Jews of that century; that Xanthicus or Nisan had thirty days, Artemisius or Iyar, twenty-nine days, Daesius or Sivan thirty, Panemus or Tamuz twenty-nine, Lous or Ab thirty, and Gorpiaeus or Elul twenty-nine; and that throughout their existence as a nation their Sabbath was always the seventh day of the week-day count, consistently kept by them as a day of rest and abstention from labor to the point of fanaticism and fatalism. Beside this, however, we pray indulgence for presuming that the majority of dates transmitted to us in his chronicle of the *Wars* were seventh-day Sabbaths, chosen by the Romans deliberately as strategically opportune times to wage war against the Jews. That the fifth of Artemisius or Sivan, the third, seventeenth and and twenty-fourth of Panemus or Tamuz, the ninth of Lous or Ab, and the seventh of Gorpiaeus or Elul were Sabbaths or Saturdays, will be admitted by all who will attempt to prove or disprove the octaviation of these dates. That Xanthicus or Nisan fourteenth was a Thursday, definitely fixed in its relation to the Sabbath days of the year, will appear to anyone who will write out in full the twenty-five days of the investment of Jerusalem from the fourteenth of Xanthicus or Nisan to the seventh day of Artemisius or Sivan. There will then, too, appear the discrepancy which we want to bring out by this process of hemming in from both sides. It will appear that, in this brief part of a year, there is a gulf fixed, a rift in the rock, a cleft in the cliffs of time. It is true, the interstice amounts to only *one day* of twenty-four hours, but this is exactly the objective we are driving at. It is the locality of one of the four intercalary or leap-year days required in every nineteen-year lunar cycle to compete with every cycle of nineteen solar years. Hereafter we shall know and be prepared to inject

one of these four extra-intercalary days in this place, between the preparation-day of the Passover and the day of Pentecost, either as a *bis-quarto-deciman* interpolation or as an appendicidal thirty-first day of the month Xanthicus or Nisan, in the first year of every Metonic or nineteen-year lunar year cycle.

While we are ranging the age-old series of Sabbaths in their unbroken succession in terms of the Jewish or Syro-Macedonian calendar, let us also, if possible, clothe them in descriptions of the Julianized Roman calendar by synchronizing them with dates derived from the Roman system of chronology. Now, if we, like Bond, Totten, and others who touch upon the subject, reverse the series of dominical or Sunday letters from our own day or, let us say, from the time of the Council of Nice (Cal. C, 325 A. D.), to the year 70 A. D., we shall find that the year J. P. 4783 or 70 A. D. is connoted with the letter G. Now the calendar or almanac connoted G indicates that the Saturday in August most closely in proximity with the ninth day of Ab or Löus would be the fourth of August of that year. Yet, for reasons more psychological than historiographic, it appears that the ninth of Löus or Ab, for instance, corresponded with the first of Thoth of the Egyptian year Nab. 818, which in that year fell upon the sixth of August, as the seventh and eighth Gorpiaeus or Elul harmonized with Thoth twenty-ninth and thirtieth. The psychic connection between these dates cannot be ignored, seeing that Titus' principal legions were transferred to Palestine from *Egypt*. We are therefore convinced, and shall prove as we go along, that the Julianized Roman date to correspond to the ninth of Löus or Ab was not the *fourth* of August (Cal. G.), not the *fifth* of August (Cal. A.), but the **SIXTH** of August (Cal. B). However this new, or rather the old, original, genuine seriation of the Sunday letter may be vindicated, we are assured, and shall demonstrate as we proceed, that all Sunday-letter-designations of the years constituting the Jewish-Roman or Asmonean-Herodian Era must be reduced two stages, so that the transition of the beginning and end of the Era from the erroneous to the correct connotation will wear a face like this:

From Saturday, Dec. 20th, 165 B. C. FE, to Saturday, Aug. 4th, 70 A. D. G
 From Saturday, Dec. 21st, 165 B. C. E, to Saturday, Aug. 5th, 70 A. D. A
 From Saturday, Dec. 22nd, 165 B. C. G, to Saturday, Aug. 6th, 70 A. D. B

In accordance with this arrangement of the Sunday letter for this year, and moreover, in keeping with the correct emplacement of the bis-sextile or leap-year days in the Julianized and Augustanized Roman calendar-cycle, the readjustment for the duration of the Jewish war, which occupied the last four years of the first nineteen-year cycle of the VIth Calippic Period will assume an aspect like this:

<i>Cal. P.</i>	<i>Met. Cycle.</i>	<i>Sel.</i>		<i>Julian</i>	<i>Dom. Letter.</i>
VI.	16	378	⌋	66 A. D.	Cal. G
VI.	17	379	⌋⌋	67 A. D.	Cal. FE
VI.	18	380	⌋⌋⌋	68 A. D.	Cal. D
VI.	19	381	⌋⌋⌋⌋	69 A. D.	Cal. C
VI.	1	382	⌋	70 A. D.	Cal. B

With the aid of the Sabbatic dates exhibited in Josephus' history of this period, we shall now endeavor to determine just *where* in this line-up, or in which two of these four Seleucic years, intercalary months must be inserted. As is well-known even to amateur chronologists, there are several ways of intercalating the requisite seven months in each nineteen-year cycle. There is, to begin with, the most primitive and elementary mode of intercalating every third year—the third, sixth, ninth, twelfth, fifteenth, eighteenth, and, to top them off, the nineteenth year. Then there is the most modern and scientifically correct method of injecting these embolismic months into the third, sixth, eighth, eleventh, thirteenth, seventeenth, and nineteenth, with the alternative of intercalating either in the spring or in the autumn of the year. Finally there is the intermediate, improved, yet not perfect manner of inserting the embolismic months in the third, FIFTH, eighth, eleventh, FOURTEENTH, SIXTEENTH, and nineteenth years. Of these divers methods, it stands to reason the modern and most perfect is the most unlikely to have been used by the ancients. In fact, such an assumption is as anachronistic and therefore as improbable as the introduction of modern inventions into the ancient world would be. It is therefore entirely nugatory and needless to apply the modern mode of intercalation to the calendar-cycles used by the Jews and the Syro-Macedonians in general. Nevertheless, to satisfy ourselves that this procedure is, and must be found incompatible with the facts, we shall apply all known methods to the period marked off, and then abide by the results.

To the end that we may clearly see with what manner of tools we are to test the intercalation of the seven months in each cycle, let us first of all analyze the elementary contents of this period of four years and a half by reducing the years to days and weeks. The reduction of years to days and weeks will yield the principle of sabbatization on which we intend to base all of our major as well as minor calculations.

The war of the Jews in rebellion against the Romans began, according to Josephus (*Wars*, B. II. C. XIV, §4 and C. XV, §2), "in the twelfth year of the reign of Nero, and the seventeenth of the reign of Agrippa, upon the sixteenth day of the month Artemisius" [or Iyar]. This being the forty-sixth day of the Jewish and Syro-Macedonian year, Sel. 378 (hieratic) or 377

(civil) [Nisan 30 + Iyar 29 = 46 ds]. the total number of days from the sixteenth of Iyar or Artemisius, Sel. 378, to the ninth of Ab or Lous, Sel. 382 (sacred) or 381 (civil), is $[354 - 45 =] 309 + 354 + 354 + 354 + 30 + 30 + 218 = 1559$ days (assuming that certainly two, but not more than two months of thirty days each are due to be counted in). Deducting from 1559, the days contained in 67–70 A. D., to obtain the number of days included in the war period in 66 A. D., we find that they amount to 1314 [366 d. in 67 A. D., 365 in 68, 365 in 69, and 218 in 70 A. D.], and, being subtracted from 1559, we retain a remainder of 245 days in 66 A. D. But 245 deducted from 365 leaves 120 days, the number of days elapsed in 66 A. D. before the beginning of the war: therefore the day following the [31 d. of January, 28 of February, 31 of March, and 30 days of April =] 120th day of the year, which was the first of May, was the fatal day when the Jews began the disastrous war which ended with their ceasing to be a nation among nations.

Now, if to obtain the week-day character of this ill-fated day, we deduct these 1559 days of the war period from the sum total of days contained in the Asmonean-Herodian Era, (which we have found to be 85330 days), and divide by seven, thus: $85330 - 1559 = 83771$, we have a remainder of 83771 days, or 11967 weeks and two days, showing that the day before the war's beginning was a second day of the week or a Monday, and the day of the war's origin itself, the sixteenth of Artemisius (or Iyar) and the first of May, 66 A. D., a Tuesday. This characterization of the 120th day of the Julian year ought to be sufficient to indicate the character of the dominical letter (G) appropriate to this year, but, having proposed and promised to apply a certain probe to our work which should prove to every man's satisfaction that this characterization is right, we shall put our principle of sabbatization to a test on another date involved in the same period of the war.

If, to the sum of the days elapsed before the beginning of the war, we add the remaining fourteen days of Artemisius (or Iyar), the thirty days of Daesius (or Sivan), the twenty-nine of Panemus (or Tamuz), and the fifteen days of Lous (or Ab), [the date of the first attack on the fortress of Antonia], we arrive at the eighty-eighth day of the war period and the 83859th day of the Asmonean-Herodian Era, or, in terms more to the point, at the sixth day or Friday of the era's 11980th week, when the Romans "made an assault upon Antonia, and besieged the garrison which was in it two days, and then took the garrison, and slew them, and set the citadel on fire." (*Wars*, B. II, C. XVII, §7) Hence it follows that, although or rather because the second day of the siege was a Sabbath, the assault was successful on the sixteenth of Lous (or

Ab), being the (Sabbath or) Saturday of the 11980th week of the Asmonean Herodian Era. But by the same token the $[88+1=]$ 89th day after the 120th day of the year [April thirtieth], was the twenty-eighth of July, which, being the 209th day of the year began its course with the first of January on a Monday, was the twenty-ninth Saturday in a calendar marked with the dominical letter G. The date of this first capture of Antonia on the sixteenth of Artemisius (or Iyar) sixteenth, Sel. 378, or July twenty-eighth, 66 A. D., was therefore undoubtedly a Sabbath or Saturn's day.

Again, if to the sum of bygone days of the Jewish-Roman era before the outbreak of the Jewish war, viz. 83771 days, we add the remaining fourteen days of Artemisius (or Iyar), the thirty days of Daesius (or Sivan), the twenty-nine days of Panemus (or Tamuz), the thirty days of Lous (or Ab), and the first seven days of Gorpiaeus (or Elul), that is to say, the first 110 days of the war period from its commencement to the murder of the high-priest, thus: $83771+110$, we obtain the sum of 83881, which, being divided by seven, goes to prove that the seventh of Gorpiaeus (or Elul) was the last day of the 11983^d week of the era, and therefore, as Josephus says, it was a Sabbath or Saturn's day. "For indeed it so happened that this murder [of the high-priest Ananias] was perpetrated on the Sabbath day, on which day the Jews have a respite from their works on account of divine worship." (*Wars*, B. II, C. XVII. §10). Going through the same process of adding 110 days to the amount preceding the outbreak of the war on May first, viz. 110 days to 120 days, we reach the 230th day of the year J. P. 4779 or 66 A. D., which, being the thirty-second Saturday in a year beginning with a Monday, goes to show that this 111th year of Julius Caesar's Calendar was originally and properly designated with the Sunday letter G. This second date, therefore, must also be put down as a Sabbath or Saturn's day.

With these genuine matters of fact thus authenticated, that G for 66, FE for 67, D for 68, C for 69, and B for 70 A. D., is the true historic reading of the Sunday letters for the Jewish war period, we shall now proceed to put the various systems of intercalation to the test.

The first probe to be applied to the emplacement of the first embolismic month to be intercalated in the period of the Jewish war, is so situated that the question at issue is almost decisively settled by this one extremely important date—the date of the Roman rout at Bethhoron. "This defeat," says Josephus (*Wars*, B. II, C. XIX, §9), "happened on the eighth day of the month Dius [Marchesvan], in the twelfth year of the reign of Nero." It occurred, accordingly, in the fall of the same Seleucic year 378 and the same Julianized Roman year J. P. 4779 or 66 A. D. in

which the Jewish war broke out. Being so situated that its dating may, and indeed must, be affected critically either by the injection of an intercalary month or even more so by the omission of such intercalation, whether such intercalation be accomplished *before* the beginning of the Seleucic civil year or in the dead waist and middle of the year when reckoned hieratically from spring to spring. If it is figured in conventional style or civilian fashion from autumn to autumn, it may be regarded as the sixteenth year of old-fashioned "Metonic" or nineteen-year cycle, and may have been preceded by an intercalation attached to the end of the fifteenth year, which, in this case, would indicate the use of the most ancient and primitive form of intercalation. If, on the other hand, this Seleucic year was computed proleptically, like the Egyptian Nabonassan years, it must have been intercalated in the midst of its duration, and, in that case, would have to be regarded as the sixteenth year of an historical Calippic nineteen year cycle, which had thus been intercalated according to the intermediate manner of complementation employed by Calippus and all people under Syro-Macedonian influence. And if, on the contrary, there was no intercalation at all between the beginning of the war and the discomfiture of the Romans at Bethhoron, it is plain that we should have to resort to modern methods, viz. to interpolate a complementary month in the seventeenth year of the then current nineteen-year cycle, which manner of intercalating a calendar-cycle of antiquity is, by the very nature of the case, prohibited.

Now, to apply the probe to the date itself, let us see how the facts and figures bear us out. According to the description of Josephus (*Wars*, B. II, C. XIX, §§ 7-9), the disastrous retreat of the Romans down the battle-strewn Bethhoron road continued up to a time when it was no longer advisable or permissible for the Jews to keep up the chase. Having retired from the City, or rather from Mt. Scopus, some seven furlongs distant from Jerusalem, the Romans rested the better part of two days in their former camp at Gabao, but on the third day resumed their retreat with renewed desperation and despair. As the Jews from city and country crowded in upon them, they gave themselves up, on the third day, to the utter abandon of a precipitate flight. So great was the consternation and panic of the Roman forces that they "left behind them their engines for sieges, and for throwing of stones, and a great part of the instruments of war. . . . Indeed these things were come to such a pass, that the Jews had almost taken Cestius' entire army prisoners, had not the night come on, when the Romans fled to Bethhoron." Yet, when, in the morning, the Jews continued their pursuit of the flying foe, and followed up their encroachment as far as Antipatris, they

suddenly came to the conclusion that they could not overtake them anyway, and returned "running and singing to their metropolis." And so the day came to a curious close "on the eighth day of the month Dius [Marchesvan], in the twelfth year of the reign of Nero."

Now we have here a problem in psychology as profound and perplexing as anyone could wish to fathom. The problem is this: For what cause or reason should the victory-crowned Jews have halted their successful pursuit of the Roman army at Antipatris, a Herodian stronghold some twenty-six miles from Caesarea and forty-two from Jerusalem? Why should the Jews, with the Roman capital of Palestine only twenty-six miles ahead and open to capture, have abandoned the chase, and undertaken instead a home-run of forty-two miles to Jerusalem, not with fatigued and tired limbs, but dancing and singing, to their metropolis? Why should the fortune-favored Jews, having their foes on the run and enjoying the benefit of constant reinforcements all along the line, suddenly come to a standstill, swing right about face, and return to their homes with their task half-done and their fight half-won? It cannot be said that they were too tired and exhausted, for they went back homeward singing and dancing. They were not too few in number or too weak in man-power, for their preponderance was continually augmented. Nor were they lacking in courage or wanting in proper fighting spirit, for they were in the finest fettle while their antagonists were disspirited and dejected as broken-down morale and shattered discipline could make them. How, then, is it that the victorious Jews, in the hour of success, conducted themselves so much at variance with what might have been expected of them? The answer is this: It was a point of order as to time-observance and time-reckoning.

It may seem strange, indeed, that the lack of time to pursue a beaten enemy should ever have occurred to a victorious and triumphant host; mind you, not to a lone individual, but to an aggregate, conglomerate complex like an army. Yet it is a matter of fact and a record of history that this phenomenal idiosyncrasy of the national Jewish mind was not an isolated case in the existence of the Hebrew race. It occurred before, when Judas Maccabeus had put Nicanor, the enemy of the Jews, to flight, "and pursued them far: but lacking time, they returned: for it was the day before the Sabbath, and, therefore, they would no longer pursue them." (2 Macc. VIII, 25. 26) So, it appears, it happened again, in the twelfth year of Nero, on the eighth day of the month Dius [Marchesvan], that the Jews, being destitute of the necessary amount of time to keep up the pursuit of the Roman army, and deprived of the evening hours by the setting

in of the Sabbath with the instant of sunset, "they came back running and singing to their metropolis."

That the day of Bethhoron was the day before a Sabbath, not solely on the strength of circumstantial evidence or any other argument of mere probability, but a Sabbath on the head of a hoary succession of thousands of Sabbath-days, may be easily demonstrated by doing a simple sum in arithmetic. Adding the eight days of Dius [or Marchesvan] and the thirty of Hyperberetaeus [or Tisri] together with the $[177-45=]$ 132 days in the first half of the Sacred year plus the thirty days of an intercalary month to the number of days contained in the Asmonean-Herodian Era previous to the outbreak of the war, thus: $83771+8+30+132+30=83971$, and, dividing by seven, we find that the eighth day of Dius, the great day of Bethhoron, was the sixth day or Friday, and the ninth of Dius [which began at sunset] the seventh or Sabbath day, of the 11996th week of the Jewish-Roman Era.

Being, furthermore, the 200th day of the Jewish war, which began on the first of May (a Tuesday), the eighth day of the month Dius [or Marchesvan] ran parallel with the 320th day of the Julian year J. P. 4779, or 66 A. D., which was a Friday, until sundown, when the ninth of Dius set in and synchronized in the main with Saturday, the seventeenth of November, 66 A. D. (Cal. G). So we see that, in either case, whether we insert a thirty-day intercalary month in the late summer or early fall of 66 A. D. as attached to the end of a fifteenth year of an old-time Metonic cycle, or as attributed to the sixteenth year of an intermediate Calippic nineteen year cycle, the result is, that the date of the battle of Bethhoron conforms perfectly with the week-day characterization and all the calendric conditions of the case. And this being true to life and altogether compatible with the happenings of the day, the intercalation at this place appears true to form, or, let us say, in agreement with the facts and the fashion of the day in the matter of complementing the Jewish calendar-cycle.

On the other hand, how does the Hebrew almanac fare in case an intercalation in this year, Sel. 378 or 66 A. D., is omitted? The answer is unfavorable. For if, to the number of days in the Jewish-Roman Era preceding the outburst of hostilities, 83771 days, we add the 132 days from the sixteenth of Artemisius [or Iyar] and the thirty-eight from the first of Hyperberetaeus [or Tisri], thus excluding the intercalary month of thirty days, we arrive at the 170th day of the war and the $[83771+170=]$ 83941st day of the Asmonean-Herodian Era. Divide this by seven and you find that this modern method of not complementing the cycle in the sixteenth year makes the date of the battle of Bethhoron

fall on a Wednesday; for such is the meaning of 11991 weeks and four days. But a Wednesday for the eighth day of the month *Dius* [or *Marchesvan*] makes the following day a Thursday, a Jewish half-holiday indeed, but a day otherwise devoid of fanatic incentive, unlike the furious inspiration of Sabbatarianism. Hence we may justly conclude that every modern method which fails to provide an adequate complementation for the sixteenth year of a Metonic cycle proves itself inadequate as well as irrelevant to the subject: it simply has no legitimate place in the problem.

But let us not rest content with a single test. Let us see how the results compare with the conditions imposed by the date of an event which occurred in the early part of the following year, and therefore is affected by the timely injection or the unseasonable omission of an intercalary month. The date to which we refer has the added advantage of being a complex and correlated description of an event, the long-continued extensive siege and capture of Jotapata. The siege, having lasted forty-seven days, up to its conclusion "in the thirteenth year of the reign of Nero, *on the first day of the month Panemus* [or *Tamuz*]," included in its long duration one day in *Panemus*, thirty days in *Daesius* [or *Sivan*], and sixteen days in *Artemisius* [or *Iyar*], thus placing its inception on the fourteenth of *Artemisius*, the date of the Lesser or Little Passover arranged for the benefit of belated pilgrims to the greater Passover in *Xanthicus*. The fourteenth and twenty-first [and twenty-eighth] of *Artemisius*, as well as the sixth, [thirteenth], twentieth, and twenty-seventh of *Daesius* [or *Sivan*] clearly octaviating in the manner of week-ends or Sabbath days, it is no violation of dialectics to conclude that these "eighth" days were in reality Sabbath-days. To prove that they were such (one and all if any one of them), it is only necessary to compute the chronological location of *one*, say "the twentieth day of the month *Daesius*" [or *Sivan*]. There is a reason for this. The fact that *Vespasian*, like *Pompey the Great*, "took notice of the *seventh* days, as tactically favorable days for siege operations (see *Wars*, B. II, C. XVI, §4) is an argument in favor of its inherent probability. But, not to presume on any circumstantial evidence, add the seventy-nine days [of *Xanthicus* 30 + *Artemisius* 29 + *Daesius* 20 = 79] of the second year of the war Sel. 379, and the 339 days [384 - 45 = 339 d.] of the first year of the war Sel. 378 (N. B! including an intercalary month of thirty days), to the number of days in the Era preceding the eruption of real fighting, thus: $83771 + 339 + 79 = 84189$, and, after a division by seven into sevens, you round out 12027 weeks without a remainder, that is to say, the last day of this number, was a seventh day or Sabbath. The larger significance of this result is this, that it fixes not only the serial location of this ONE Sab-

batic siege-date, but the locality of *seven* of them besides this one, from the fourteenth of Artemisius on to the fourth day of Panemus, when Vespasian the elder improved the peaceful quiet of the eighth Sabbath-day connected with the siege of Jotapata. In beginning and concluding the siege with a Sabbath or Saturn's day, he gave a pentecostal solidarity to the period which is thereby removed from the field of uncertainty and doubt. The omission, on the other hand, of the requisite embolismic month would (if it could be managed) have the effect of annihilating a mosaic of Sabbatic dates such as can scarcely be excelled in chronology. It therefore goes without saying that any method of complementation which would omit the month of intercalation during the Jewish war period up to date simply cannot be countenanced as a possible way of reconstructing the Jewish or Syro-Macedonian calendar.

Since, then, of all the various ways of intercalating a nineteen year lunar cycle only those of Meton and of Calippus show any likelihood of having been adopted by the Jews, during this period at least, let us narrow down the availability of these methods of intercalation to a single mode. In other words, let us see whether one or the other of these two methods cannot be eliminated by a test involving a later date. Seeing that neither of these two methods suggest an intercalation in the seventeenth year of a lunar cycle, but that of Meton calls for one in the eighteenth year of its run, how does a complementation in Sel. 381 or 69 A. D. comport with the calendric character of (let us say) the fifth of Daesius [or Sivan] in Sel. 381 or 69 A. D.?

According to Josephus' description this day before the feast of Pentecost was signalized by a military manoeuver of some consequence, reminding us of the tactics of the Roman generals of that age to avail themselves of the religious weaknesses and foibles of their enemies. He tells us that "Vespasian removed from Cesarea, *on the fifth day of the month Daesius* [or Sivan], and marched against those places of Judea which were not yet overthrown." (*Wars*, B. IV. C. IX. §9) We ask: Why did Vespasian choose the fifth of Daesius that year if not because of the strategical advantage a Sabbath and Pentecost conjointly gave him? If this day before the feast was not selected because of its transcendent religious significance to the Jews and its great utilitarian worth to the Romans, from what motive was it selected? Now, if we avail ourselves of the intrinsically more probable method of Calippus in intercalating his nineteen-year cycles in each nineteenth year [not in the eighteenth], the week-day character of the fifth of Daesius is Sabbatic, and the motivation of Vespasian is easily understood. But if, on the other hand, we inject an intercalary month in the fall of Sel. 381 or 69 A. D., the date

loses its Sabbatic character, its superior sanctity for the Jews as the seventh Sabbath of the Pentecostal period, and its surpassing usefulness for the Romans as a day of easy and successful operation: in a word, it is debauched into a common week-day. Just make the ordinary probe. Adding the $132+30+177$ days of Sel. 378, the 354 of Sel. 379, the 354 of Sel. 380, and the $[30+29+5=]$ 64 days of Sel. 381, to the 83771 days in the Era before the war broke out, and you have the 5th of Daesius [or Sivan] enregistered as the 84882nd day of the Asmonean-Herodian Era. Divide this sum by seven to obtain the full tale of sevens, and you have 12126 full weeks, with no remainder to mar the beauty and symmetry of the result. The method of Calippus insures a Sabbatic rank and chronological value to the fifth of Daesius. The method of Meton, however, does not. For if, favoring the mode of complementation introduced by Meton, in the most elementary style possible, we write out the problem like this: $83771+132+30+354+354+30+177+64=84912$, and, dividing by seven, we obtain 12130 weeks and two days, we perceive at once that the date of Vespasian's march into Judea is dislodged from its proper place and misplaced more than a month later, on a Monday. Instead of being contemporary with Saturday, May fifteenth, it is synchronized with Monday, the fourteenth of June, 69 A. D., thirty days into the current nineteen-year cycle, as required by Meton, you would procrastinate the vernal holidays of the following year, the Passover and Pentecost of Jerusalem's investment, to such a degree that the former would fall on the fifteenth of May and Pentecost on the fifth of July. It is evident from this attempt at intercalating three complimentary months of thirty days each, respectively in the fifteenth, eighteenth and nineteenth years of the old-fashioned Metonic cycle, that this ancient and time-honored calendar-cycle scheme cannot be the right one to apply here, and, what we wish to establish here, cannot have been employed at this period of Hebrew history. If properly applied it might come out all right in the final round-up, but the dates caught and imprisoned, as it were, in the meantime, cannot be made to jibe with their historical description. Hence we may consider the archaic and antiquated Metonic system as eliminated from further consideration, leaving the intermediate system as used by Calippus alone in the field.

But before we proceed to apply the Calippic system to other parts of his nineteen-year lunar cycle, we must complete our examination of the Jewish war period with another end in view. We have so far considered only the introduction of whole lunations or months into their proper places in each cycle. We have still to consider the introduction of single days—four in number—into the system to offset the insertion of bissextile or leap-year

days. So far we have discovered and designated the site of *one* of these days, in the first year of the cycle and, apparently, in the first month of the year hieratically reckoned. The question now is, and very important it is, too: Is there room in the range of the war period for the intercalation of a special day? Do the regular or normal contents of this period admit of the insertion of an additional day? Can the contents of this period be so arranged that the necessary space will be created for an extra intercalary day? On the answer to this question may depend our reply to the query: May not the second extra-intercalary day demand a permanent dwelling-place here, somewhere within the borders of the Jewish war period?

To settle this question definitely, let us recall the characterization of a date near the beginning of hostilities which, being comprehended in the first half of the sacred year, is distant enough from the beginning to encompass the possible location of a "leap year day," yet not too remote from the same starting-point to be itself a safe frontier fort for the defence and protection of the territory lying between. We refer to the date relating to the capture of the king's palace on the sixth day of Gorpiaeus [or Elul], and the consequent assassination of the high-priest "on the next day;" "for indeed," says Josephus (*Wars*, B. II. C. XVII. §§ 8, 9, 10), "it so happened that this murder was perpetrated *on the Sabbath-day*, on which day the Jews have a respite from their works on account of divine worship."

This explicit and plain spoken definition of the time when this manslaughter happened leaves absolutely no doubt as to what the historian intended to say. It is a chronological expression of a fact—a stubborn, obstinate, headstrong fact,—that this outrageous profanation by bloodshed, aye, by loyal, intensely patriotic Jews, was actually "perpetrated," as Josephus says, "*on the Sabbath-day*." And there was no question as to the *time*. This sacrilegious act, this assassination of the supreme pontiff, the highest executive and dignitary of the Jewish church and state, was perpetrated and barbarously enacted on the seventh day of Gorpiaeus [or Elul], which, being the 155th day of the Jewish sacred year [$30+29+30+29+30+7=155$], was also [$155-1=154\div7=22+0$] the regular seventh day of the twenty-second week of Sel. 378 (sacred); in other words, the year beginning with a Sabbath [Nisan 1=March], the seventh of Gorpiaeus could not be anything else than a Sabbath, and, being itself one of the units which went to make up the twenty-two full-organized weeks, it could not give way and make room for an illegitimate intruder, whatever the name for an extra intercalary day. The lawful collocation of the seventh of Gorpiaeus with the Sabbath of the twenty-second week of the year and the

11983rd week of the Era, cannot be disrupted and undone by the illicit intrusion of an interloper in the first half of the year 378. Neither can an extraordinary intercalary day be honestly or fraudulently inserted in the other half of the year or the rest of the Jewish war period.

As the characterization of the initial date, Apelleus or Casleu twenty-fifth, Sel. 148 [December twenty-second, 165 B. C.] and of the final day, Löus or Ab ninth, Sel. 382 [August sixth, 70 A. D.], as "Seventh" or Sabbath-days, has this effect, that the period of Hebrew history so staked off cannot be augmented or diminished by a single day, under whatsoever name and title you please, so the explicit and precise definition of the seventh day of Gorpiaeus [or Elul] as a literal liturgical Sabbath-day, has, in like manner, the unmistakable effect, that this minor or lesser period of Hebrew history cannot be increased or decreased by a single day, call it intercalary, bissextile, Badhu, or whatsoever you will. Being confined to the limits set by Sabbatic sanctity and seventh-day consistency, whether you deduct 83881 days, the number of days in the Era preceding the war, from the sum total 85330 days in the Era, or subtract the number of days in the first year of the war [155] preceding the religiously specified Sabbath day on the seventh of Gorpiaeus from the total collected from the first of Nisan, Sel. 378, to the ninth of Ab, Sel. 382, there remains an amount, 1449 days or 207 weeks, quite as impervious to interpolation as can be found in chronology. Here as in the case before this, there can be no increase or decrease in the number of days, either in the individual weeks or the months or the period of the war as a whole. To attempt to insinuate a single day would be a gesture to invite disorder and disaster. There simply cannot be found a site or locality within the bounds of the Jewish war period or in the years lying in the zone of the sixteenth, seventeenth, eighteenth and nineteenth years of the nineteen-year cycles that could or would be appropriate for the intercalation of a single day. It is therefore more than useless to look for such a place in the belt thus indicated, and we may just as well turn our attention elsewhere.

In turning to other parts of the nineteen-year lunar cycle, preferably to those parts not yet covered by our investigation, let us pause to formulate the plan of procedure by which we may hope to accomplish the end and aim of our labors. We have, so far, examined only the *first* year of the cycle, and found *one* locality for one of the four extra-intercalary days, and we have painstakingly examined the *four* last years of the cycle, but found none in this section. Let us therefore now take up the search for the other three localities which necessarily must be found before we can avail ourselves of them in the construction

of the Jewish or Syro-Macedonian calendar as it was used in the course of the Asmonean-Herodian Era.

In order to succeed in a search as tedious and wearisome as hunting for a needle in a haystack, it is necessary to proceed in a way that shall be systematic and certain to produce results. Having hit upon a principle or plan of operation as sure and certain as the proverbial twice two is four, let us apply this principle to all of the thirteen nineteen-year cycles involved in our Era, but in such a manner as a present-day architect would use to erect a modern sky-scraper or rather a row of thirteen nineteen-story buildings, rearing the steel frame-work of each building first and then filling in the bricks or stones, beginning with the highest floor as the first, and finishing with the lowest story as the nineteenth and last. Such a procedure, if feasible, would enable us to observe the historical sequence of time and events, and would lead us most surely, in natural order, to the factors we need for the rebuilding of the calendar both as to the intercalation of embolismic months and the injection of extra intercalary days. Then, as we try to envisage this row of buildings in the style of Calippus, its author, which we are convinced was prevalent in those days, let us also realize the interior features of the building by an actual reconstruction of the calendar as we go along. To this end we shall now transfer our probing operations from the *last* of the nineteen-year cycles employed before the destruction of the Temple to the *first* of the Calippic lunar cycles employed under the aegis of the Maccabees.

Having ascertained exactly how many of the 85330 days of the Asmonean-Herodian Era can possibly be assigned to the fraction of the first cycle to come under the administration or jurisdiction of the Asmonean princes, and how many must be reserved for the rest of the Era's cycles, we may now put this fraction, which for the most part is parallel to the period of the Jewish war, to the test of the criterion supplied by the infallible succession of Jewish Sabbaths.

VOLUME III. CHAPTER II

THE DESECRATION AND RECONSECRATION OF THE TEMPLE UNDER THE MACCABEES

Extending our survey beyond the fourteenth year of the cycle, so as to embrace the years from the eleventh to the fourteenth, or, in other words, so as to take in the disastrous period known in apocryphal and apocalyptic literature as "the abomination of desolation," we shall now compute the exact measure of time between the two chronological milestones, which mark the beginning and the end of this famous, or, shall we say, infamous, period of Hebrew history. It is the point of origin of the Maccabean or Asmonean dynasty, the source of Pharisaic sectarianism, or Jewish Puritanism, and the rise of latter-day nationalism; in a word, the renaissance of the Hebrew race. Now, there are those of frigid antipathy to all Semitism who coldly opine that, on the whole, the world at large, and the Jewish in particular, would have been better off, if there had never been a revival of Jewish consciousness and Jewish culture and civilization. On the other hand, there are those of flaming sympathy who devoutly hold that the cause of true religion has been vastly benefited by the success of the Maccabean cause. But be that as it may, seeing that it is not our province to delve into the dogma of this sect or that, but solely to dig down to the rock bottom of chronology in our endeavor to reconstruct the calendar of those days, we shall try to ascertain, by this our next calculation, whether there is a possible chance or an imperative need of an extra intercalary day, or whether there is no room for either the one or the other, in the wide expanse of the belt comprehending the eleventh, twelfth, thirteenth and fourteenth years of the nineteen-year lunar cycle.

We have already learned that the actual duration of the weekly service periods of the Jewish priesthood corresponded to the time claimed for it by Josephus to an astonishing degree, so much so that we might easily condone the slight discrepancy in the count, and utilize this priestly epoch with its 508 sacerdotal revolutions [minus fourteen days] as an element of proof that the Jewish-Roman or Asmonean-Herodian Era began with the re-consecration of the Temple on the twenty-second of December, J. P. 4549 or 165 B. C. It could not have been a year earlier, as claimed, for instance, by Prof. Totten, nor two years later, as protested, for instance, by Dr. Seyffarth, without adding to the

amount of discrepancy, as the cisterior end of the era cannot be moved. It would, then, be settled as an incontrovertible fact that the 148th year of the kingdom of the Greeks coincided with the 4549th year of the Julian Period or 165 B. C., the 145th year of the Seleucidae with the 4546th year J. P. or 168 B. C., the 143rd year Sel. with J. P. 4544 or 170 B. C., and so forth. By means of this chronological metron we could then amalgamate all the various measures of time known to have been used at the period of the Jewish confusion of the calendar. For, synchronistic with the 148th year of the Seleucidae was the consulship of T. Manlius Torquatus in 588 A. U. C. (Cap.) (II Macc. XI. 34) and the eleventh year of Antiochus Epiphanes. Coincident with the 145th year of the Greek kingdom was the consulship of L. Aemilius Paullus in the year of Rome 585, the eighth year of Antiochus Epiphanes, the thirteenth year of Ptolemy Philometor in Nab. 580, and the eleventh year of Perseus in the 156th year of the Philippic Era. So, too, coeval with the 143rd year of the Seleucidae was the eleventh year of Ptolemy Philometor, when Antiochus Epiphanes made his second raid upon Egypt (see Clinton, *Fasti Hell.*, Vol. III, p. 319ⁿ), not to mention the corresponding regnal years of contemporary kings not expressly stated. We might add, (on the hypothesis that the stadium year of the 162nd Olympiad was, according to Josephus' system of Olympiadic reckoning, coetaneous with the fourth year of the reign of Antiochus Sidetes in the 179th year of the Seleucidae, and, at the same time, coincident with the first year of Hyrcanus in the seventh or Sabbatic year 134 B. C.; cf. Josephus, *Antiq.* B. XIII. C. IX. §2), that the 148th year of the Seleucidae, which beheld the glory of the purified Temple, corresponded at its point of contact to the second year of the 154th Olympiad, while the 145th year, which felt the bitter profanation of the fane, tallied in the same manner with the third year of the 153rd Olympiad, as expressly enunciated by Josephus in his *Antiquities*.

But we shall proceed, in the usual manner of ascertaining dates in remote antiquity, to establish the time-limitations of three great events which are known to have taken place within the same twelvemonth according to the Julian style of reckoning. We know that the battle of Pydna, in which the Roman legion demonstrated its superiority over the Macedonian phalanx, was fought, as Livy says (*H. R.* B. XLIV. C. XXXVI), "a little after the summer solstice," or, as Plutarch has it, when "it was the latter end of summer." We also know that, in the fall of the same year, Antiochus "the Illustrious" met his rebuff at the hands of the more illustrious representative of the Roman Republic, leaving, in consequence, the land of Egypt free from Syrian molestation, but exposing the neighboring countries of Judaea

and Samaria to the machinations of the offended monarch. Finally we know that, before this selfsame year had fully expired, the spoliation and pollution of the temple were accomplished facts, having been perpetrated by Apollonius, "that detestable ringleader" of Epiphanes, on the twenty-fifth day of the month Apelleus or Casleu, which corresponded on the whole to the Roman month of December. Referring now to the first of these events, it is brought not only into close connection with the solstice of that year's summer, but is distinguished by the accompaniment of a lunar eclipse. This eclipse of the moon, it stands to reason, cannot be produced by just any year of that time and age. No other year, but *one*, in fact, the very one we have described, can furnish us with an obscuration in such close proximity, and in such immediate precedence, to the summer solstice as the 4546th year of the Julian Period or the 168th year before the Christian Era. The line of eclipses from 173 to 164 B. C. leaves but a single choice. The darkening of the moon predicted by the Roman soldier-astronomer, and interpreted as a portent of evil for the Macedonians, was none other than the total obscuration on the night of the twenty-first of June, visible in Macedonia at 8h. 2m., J. P. 4546 or 168 B. C. If you have no list of the eclipses of B. C. 173 to 164, compare the series in the almanacs for A. D. 1875 to 1884. Recurring almost to the day, the two teams may appear as perfectly identical.

<i>B. C.</i>	<i>Date of Eclipse</i>	<i>A. D.</i>
173	—	1875
172	March 10	1876
	September 3	
171	February 27	1877
	August 23	
170	February 17	1878
	August 12	
169	—	1879
	December 27-28	
168	June 21-22	1880
	December 16	
167	June 12	1881
	December 5	
166	—	1882
165	April 22	1883
	October 16	
164	April 10	1884
	October 4

It may, therefore, be observed that, in proportion as the probability in regard to day and month in the make-up of the required date grows more and more likely, reckoning backward from 168 to 173 B. C., the probability in regard to the year of the

date becomes more and more untoward, as the event is thus carried into the remoter quarters of antiquity. The chronologist, therefore, who would locate all events of ancient history a full year higher up the stream than the commonly received chronology places them, will find no lunar eclipse near the time of the summer solstice in 169 B. C., while the years 170 to 173 will be so unconscionably previous that no anachronologist mindful of his reputation would be inveterate enough in his ideas to choose any one of them.

On the other hand, as the distance of each year's eclipse from the summer solstice is enlarged in proportion as we come down the stream, the date of the moon's obscuration is removed more and more into the earlier part of summer, and the degree of contradiction to the voice of history is correspondingly increased. Any school or doctor of chronology, therefore, who would meta-chronize all the events of ancient history, will find that, while the year selected may seem more probable than the generally accepted one, the day and month assigned is altogether unapprovable, for the reason that, in all the summers from 167 to 164 B. C., the lunar eclipses antedate the point of solstice more and more, occurring eleven days earlier each year than in the preceding one, and contravening the witness of history, which testifies explicitly that the battle of Pydna was fought in the *latter* half of summer, not in the former. And if, in particular, the second year below the commonly accepted date, 166 B. C., be considered, as demanded by the system of Dr. Seyffarth and others, it will be seen that, in J. P. 4548 or 166 B. C., there were no lunar obscurations whatsoever. It is therefore the misfortune of both the anachronistic and the metachronistic schools of chronology that neither 169 B. C. nor 166 B. C. have any lunar eclipse whatsoever at disposal at the time of the summer solstice, and none of the other years enlisted will lend themselves to anything like a logical system of chronology. It is therefore apparent to the most uninitiated that the only year which can be considered at all eligible as the date of the lunar eclipse and the incidental battle of Pydna is the one of actual happening, the 4546th year of the Julian Period or the year 168 B. C. The same conclusion applies to the other two events expatiated on as belonging to the same series of twelve months as the decisive battle of Pydna.

Having thus, as we trust, determined the location of the termini of the mournful period under consideration, the query next to be considered is this, How does the year J. P. 4546 or 168 B. C. respond to the calendric requirements imposed by the sacred and secular writings of the Jews? It cannot be said "Very readily," for the answer is wrapped in divergence and fraught with difficulty. There are at least two sets of terms in which the

duration of the period of desolation is conveyed. The one, espoused mainly by the prophetic book of Daniel and the apocalyptic book of John the Divine; the other championed chiefly by the apocryphal book of the Maccabees and the private writings of Flavius Josephus. The one set of terms, in the style of an oracle, divulges the secret that it was "a time, times, and half a time" (Dan. XII. 7 and Rev. XII. 14), now defining it mysteriously as forty-two months (Rev. X. 2 and XIII. 5), now with apparent clarity as "one thousand, two hundred and three score days" (Rev. XI. 3 and XII. 6), and then stating it plainly as "three years and six months" (Jos., *Wars*, I, 1, §1), or, still more explicitly, as "one thousand, two hundred and ninety-six days" (Jos., *Ant.* B X, C. XI, §7). The other set of terms, clad in the homespun of everyday parlance, states the abomination of desolation to have been of just "three year's" duration, neither more nor less (*II Macc.* X. 3: two years), reckoning from 146 to 148 of the Seleucidae, and Josephus (*Antiq.* B. XII. C. VII. §6) from 145 to 148 of the Greek kingdom.

In the midst of such confusion it is necessary to test each alleged factor of this problem as to its inherent probability. We are happily in a position to do this by means of the principle of Sabbatization which, consciously or unconsciously, underlies or pervades the chronology of the Jewish world. Both in tradition and in history, the fact is expressed or implied that the days of desecration and of re-consecration were Sabbaths or "seventh days." The intervening number of days, therefore, must be *divisible by seven*, and, mark it well, *without a remainder*. To be of practical benefit, however, the component parts of this interval must be, at the same time, the constituent parts of the then current calendar or almanac. The consistency of each would-be factor will then be apparent.

Of all the figures exhibited in the former mystical declaration of time, the number 1260 is the only one at once divisible by seven and composed of well-known calendric elements. Being composed of a "time" of 360 days, a couple of "times" of 720 days, and "half a time" of 180 days, its sum total, 1260 is equal to 180 weeks as well as equivalent to "forty-two months" of thirty days each, and, at the same time, unencumbered with a remainder. The other figures of the same class, being embarrassed with a surplus, are immediately subject to exclusion from further consideration. They do not fit in with the most general measure of Hebrew chronology.

Beside, this only appreciable exponent of the cryptic class, which seems to be available, is furthermore rendered unfit and valueless for chronological purposes by another circumstance. It is vitiated out of bounds by its association with the other

cabalistic numbers. The implication seems to be that, to complete the duration of the "abomination of desolation," the first sum (1260) is to be amplified by the addition of thirty days or more. If the correct sum is 1290, it must have become so by an intercalation of thirty days, i.e. by an extra month. If, however, the sum total of days was 1296, there must be an additional injection of six days, in what place and for what purpose nobody knows. But we know of no calendar composed of thirty-day months except the Egyptian, and of no intercalation of a thirty-day embolismic month except in the ancient lunar calendar derived by the Greeks from the Persian, Babylonian, or Assyrian fountain-head (see *Records of the Past*). If then the Jews ever employed a calendar (let us say for prophetic purposes) which was in fact a combination of the Egyptian and the Greek, intercalating a month of thirty days every sixth year in a vague "prophetic" year of 360 days, it was during that period of the Jews' national life in which they were under the influence of Greek-Egyptian suzerainty, that is, from the time when Jerusalem was subjugated by Ptolemy Lagus about 320 B. C. to the time when Antiochus the Great subdued Judaea in 302 B. C. But of such a calendar being used we have no actual knowledge. If such a calendar, at this period in particular, was employed by the Jews, we are still at a loss to account for the "1296 days" of Josephus (*Wars*, I, I, §1) or the 1335 days of Dan. XII. 12: in short, we have still no definite aim or objective to which we may aspire with confidence in the reconstruction of the Jewish calendar. However edifying and inspiring such calculations with cryptic figures and mystic phrases may be, there is no place for them in real, serious, true-to-life chronology. So, bidding farewell to this species of haruspicy, which delights in the use of round numbers and vague times and seasons, we proceed to examine the apparently scientific data employed in the second kind of demarkation of the term pertaining to the devastation of the Temple.

With the outcome of our quest already indicated and envisaged in our mind, we might fairly plunge at once into the benefits accruing to posterity from the experience of Josephus, the historian. In the oldest of his extant writings, the *Jewish Wars* (B. I, C. I, §1), composed in the closing years of Vespasian's reign (69 to 79 A. D.), he repeats the vaticination of Dan. XII. 7 and Rev. XII. 14, that the "abomination of desolation" endured for "three years and six months." In his later work, however, the product of maturer study and profounder research, he declares, in clear and unmistakable language, that the period of pollution lasted exactly three full years, we might say, to the day and to the hour. In this later work, then, the "Jewish Antiquities," which was finished in the thirteenth year of Ves-

pasian's younger son Domitian, viz. in 93 A. D., the Jewish historian bases his more expert opinion on II Macc. X. 3.5, and restates his more scientific estimate in the following express terms.

"Now it so fell out, that these things were done on the very same day on which their divine worship had fallen off, and was reduced to a profane and common use, *after three years' time*; for so it was, that the temple was made desolate by Antiochus, and so continued *for three years*. This desolation happened to the temple *in the hundred forty and fifth year, on the twenty-fifth day of Apelleus, and on the hundred and fifty-third Olympiad*: but it was dedicated anew, *on the same day, the twenty-fifth of the month Apelleus, in the hundred and forty-eighth year, and on the hundred and fifty-fourth Olympiad.*" (Jos., *Antiq.*, B. XII. C. VII. §6).

Speaking in terms of the Seleucic Era and the Olympic Scale,—both of them Greek measures of time,—the author of the *Antiquities*, himself a lover of Greek and now the writer of a Greek book for a Greek-loving people, leads us to believe that he expected the terms of the Greek or Syro-Macedonian Calendar to be a matter of common knowledge. And so they were. They were, in point of fact, the identical definitions of time employed by the Jews at home in Judea as well as abroad in the dispersion, in his own day and in the days of his father and forefather. If, then, we should translate the "Grecian" calendar as ascertained from the time of the Jewish War, 66 to 70 A. D., to the period of restoration, and by inference extend our scheme to the preceding period of desolation [168 B. C. to 165 B. C.], we should find that the terms of the one suit the calendric conditions of the other in all respects but the one exception that the old Macedonian method of intercalation requires a slightly different emplacement in the year of intercalation. Otherwise identical in the general structure of the calendar and cycle, the factors to be reckoned with in the calculation of this period would appear like this:

Sacred Count.

Sel. 145 =	Casleu 26—30 =	5 d.
	Tebeth 1—29 =	29 d.
	Shebat 1—30 =	30 d.
	Adar 1—29 =	29 d.
		<hr/> 93 d.

Sacred Count.

Sel. 145 =	Casleu 26—Adar	=	93 d.
Sel. 146 =	Nisan 1—Adar	29 =	354 d.
Sel. 147 =	Nisan 1—Adar	29 =	354 d.
Sel. 148 =	{ Nisan 1—Hyperb. 30 = 207		
	{ Dioscorus 30 = 30	d.	
	{ Dios 1—29 = 29		
	{ Casleu 1—25 = 25		
		<hr/>	

1092 d.

Secular Count.

Sel. 145 =	Casleu 26—Elul 29 =	270 d.
	Tisri 1—30	<hr/> 30
		300 d.

Secular Count.

Sel. 145 =	Casleu 26—Hyperb. 30 =	300 d.
146 =	Dius 1—Hyperb. 30 =	354 d.
147 =	Dius 1—Hyperb. 30 =	354 d.
148 =	{ Dioscorus 30 = 30	d.
	{ Dios 29 = 29	d.
	{ Casleu 2—Casleu 25 =	25 d.
		<hr/>

1092 d.

This sum of 1092 days, resulting from the simplest known process of arithmetic, being, as required by the dictum of history and tradition, divisible by seven and therefore equivalent to 156 weeks and as many pontifical service periods (both intensely safeguarded by religious zeal and selfish interest), is at once self-evident and self-explanatory. It not only comes up to the most rigid requirements as to the literal fulfillment of historical and liturgical conditions, but looms up in no small or inconspicuous degree to the fondest expectations of fairness and unsophisticated simplicity in dealing with the constituent parts of the Jewish-Macedonian calendar then in use among the Jews. No legerdemain, no machinations of augury, no manipulations of "Badhu" are employed to bring about this necessary result: "as required." It is the natural spontaneous product of the normal evolution of the calendar and nineteen-year cycle as used in common by both Jews and Gentiles, and as such, this incontestable result is of immediate, practical benefit by way of extending our insight into the form and inside construction of both calendar and cycle. For if we revolve the series of nineteen-year lunar cycles, as used in the quasi-Calippic Periods, back from the end of the Asmonean-Herodian Era to the beginning in the third Calippic Period, we find that the blight of the "abomination of desolation" covered the well-defined area of the eleventh, twelfth, thirteenth and fourteenth years of the Third Calippic Period. Covering the three full years from Dedication, Sel. 145, to Dedication, Sel. 148, and so completing our survey of second or lower half of the so-called Metonic cycles, we are now in a position to maintain that, so far as the lower hemisphere of our cycles is concerned, there is no call or occasion for the insertion of an extra-intercalary day, either here during the accursed years of desolation or in the blessed year of the Lord's ministry and passion. That we are not presuming too much, on the strength of this deduction, will become more and more apparent as we descend, from now on, *down* the stream of time.

Having thus placed the dates of the three great events of the year Sel. 145, beyond the reach of scepticism and dispute, we may now express these data in terms of the Julianized Roman calendar. Since the reconsecration of the Temple took place on Saturday, the 22nd of December, 165 B. C. or J. P. 4549 (Cal. G), the 1092 days of the desolation period must be disposed as follows. Since December twenty-second, in common years, is the 356th day of the year,

we have 356 days in 165 B. C.

366 days in 166 B. C. (leap year!)

365 days in 167 B. C.

or 1087 days in the bulk of the pollution period.

Deducting these 1087 days from the total 1092, we have 5 days remainder for 168 B. C., which being subtracted from 365, leaves the 360th day of the year as the "selfsame day" on which the Temple was despoiled and desecrated, being Saturday, the twenty-sixth of December, 168 B. C. (Cal. D).

That this description of the week-day character of the 26th of December, 168 B. C., is correct and in conformity with Julius Caesar's arrangement of the solar cycles, may be easily deduced from a division of J. P. $(4546 - 7 =) 4539 \div 28 = 162$ solar cycles + 3 years, which, in popular parlance, means that this was the *third* year of a new solar cycle which, chronographically, is marked with the letter D, signifying that, as the first day and the last day of the year was a Thursday, so the 360th day from the beginning, or the sixth day from the end, must have been, and was, a Saturn's day or Sabbath.

Hence, having satisfied ourselves that our presentiment was correct; to wit, that no extra intercalary day under any name or title whatsoever could be admitted into the count of constituent days of this desolation period, we can do no more by way of profiting from our experiment than simply to take note of the fact, and tabulate it with the already registered results of former experiments. So, if we imagine a so-called Metonic cycle to be a sphere or globe, because it revolves like one in a certain orbit, and its years return to a certain track or lane coursing through all the *cycles*, we may say that we have now reached the central, or bisecting line, as we would say, the equator of the globe. The eleventh year of such a cycle, being the central one, with three intercalary circles above it and three intercalary circles below it, we may now rest assured that, so far as calendric complementation in the lower hemisphere is concerned, there may, and indeed must be, three thirty-day intercalations, respectively in the fourteenth, sixteenth and nineteenth years of the cycle, but not a single one-day unit to take the place of "Badhu," "bissextil," or anything else of the kind. Or, if we prefer to imagine that, in the reconstruction of the Jewish calendar-cycle, we are erecting, as it were, a nineteen-story building (as we have visualized it before), we may say that we are compelled by the rigid specifications of the architect to give the same austere exterior appearance to the twelfth, thirteenth and fourteenth stories of our edifice, which were postulated for the fifteenth, sixteenth, seventeenth, eighteenth and nineteenth stories of the building. To be compatible with the facts and figures of our specifications, there must be no more than four broad courses of projecting stone or terra cotta to indicate, or represent, the seriation of *four* intercalary months, to wit, in the eleventh, fourteenth, sixteenth, and nineteenth years of the cycle, and no sort of fillet or reglet what-

soever to indicate the insertion of a single additional day. To indicate such a day (which did not, and could not exist) would be an undertaking to vitiate and falsify the records and testimony of history. We may, therefore, envisage the results of our present calculation as follows:

<i>Cycle.</i>	<i>Sel. (sacred)-Sel. (secular)</i>	<i>Ol.</i>	<i>J. P. or B. C. (Cal.)</i>	
11+	145	145	153 ²	4546 168 D
12	146	146	153 ³	4547 167 C
13	147	147	153 ⁴	4548 166 BA
14+	148	148	154 ¹	4549 165 G
15	149	149		4550 164 F
16+	150	150		4551 163 E
17	151	151		4552 162 DC
18	152	152		4553 161 B
19+	153	153		4554 160 A

Reviewing the historical associations of this remarkable doublet of dates, which stand like the pillars of Hercules, at the gateway to a new era of Hebrew history, the chronological student cannot fail to be impressed with the profoundly epochal character of these dates. They are the outstanding points of an immense evolution in the national life of the Jews. Like the great river of Egypt, which was known, in the dark ages of antiquity, to originate in the fabulously unknown and unfrequented regions of darkest Africa, until it plunged, indeed, downward in the cataracts of Assouan, yet leaped, as it were, with a bound into the cognizance of men, so the national life of the Jews resembled the Nile in the darkness of its unknown existence during the centuries of Persian regime, until, in the midst of this seeming cataclysm of desolation and ruination, it revived, was victorious in battle, and resumed the aspect of renewed energy and power, and, making history through glorious action, began to register and date events with the itemized features of a scientific chronology. Up to this doubly pivoted event, which looms up with the abruptness and awfulness of a rock-bound cataract, the river of post-exilic Judaism is so devoid of falls and rapids that there is scarcely a ripple of incident or eventuality recorded in the flow of its existence. From Nehemiah, the first sub-Persian governor of Judea, to Mattathias, the progenitor and patriarch of the Asmoneans, there is not one specimen of specific dating either in Josephus' *Antiquities* or in other Jewish literature. Even when the Jews, after centuries of obscurity under Persian rule, had been at length aroused from their lethargy by the shock of Macedonian conquest, they did not, as far as we can tell from their original writings, avail themselves of the time-measuring devices and event-recording facilities of their conquerors, but rested content with the vaguest and shallowest means of marking time invented by primitive man. Whether they actually adopted the

vague Egyptian Calendar or a compound of Egyptian and Greek calendric elements during the period of Egyptian suzerainty, we are not able to tell. Certain it is that they adapted their calendar to the retroactive hieratic or proleptic tendency of the Egyptian ephemeris. With the appearance, however, of Antiochus the "Illustrious" upon the scene, there is a radical and drastic change. Thanks to the powerful reactionary influence of the Seleucidae, however much detested and antagonized it may have been in the beginning, henceforth a new way of recording events was introduced. Now, and here, at this turning point of Jewish affairs, at this first point of contact of the Jews with the Romans in a broad cosmopolitan way, the documentary history of the Jews sets in, which, like the well-known, navigable lower Nile, may be searched and probed, perused and appreciated, by the student of chronology, the teacher of history, the doctor of philosophy, and all who take an interest in the life and affairs of their fellow-men. Instead of a valley full of dead men's bones, with a barely discernible trail of genealogies and tribal registers leading through the barren sands, we are now entering a fertile, well-watered garden of fruits and flowers, a land replete with corn and wine, a home of life and activity. By the adoption of the Syro-Macedonian Calendar, the Seleucic Era, the scale of the Olympiads, the annuals of the Roman consuls, and all the various means of keeping time used by the Jews in unison with all civilized nations of the then-known world, the remnants of Judah were enabled, with scientific precision, not only to record events of the past, but to pre-determine the recurrence of contingencies in the future. Thus, for instance, with the aid of the Syro-Macedonian Calendar, they could foretell when any reiterative date, whether anniversary or centennial, would fall due, and make preparations for its observance or celebration if such were desired. Since the Calippic calendar-cycle, adopted by them from their Macedonian masters, safe-guarded the times and seasons, governed their ritual and liturgy, and controlled their conventional activities with wonderful regularity, it was no longer necessary for two or three star-gazing priests to undertake a tedious peregrination to one of the high places of the country to discover the first phase of the new *moon* before they could tell when the new *month* was due to commence. No. Such cave-man methods had then become obsolete, just as certain ceremonies of their religion had become antiquated and out of order. They knew by consulting their up-to-date calendar-cycle that the same day on which the Temple had been defiled, the twenty-fifth of Appelleus or Casleu, Sel. 145, when it recurred three years later, would fall again on a Sabbath-day, as it came to pass in Sel. 148, and that the weekly ministrations of their priests would then be able to go on as if no interruption had occurred.

The object in selecting the later date is obvious. As it was the object of Epiphanes to profane the *place* of divine worship, i.e. the Temple with all its appurtenances, and to effect this profanation at the *time* of greatest veneration, i.e. on the seventh or Sabbath-day, so it was the aim and object of the Maccabees, not only to reconsecrate the *place* of worship, the Temple, but to hallow the *time* of religious rest, the seventh day or Sabbath of the Lord. This day, then, the twenty-fifth of Apelleus (or Casleu), was chosen by Antiochus for vilification because it was a Sabbath, and it was chosen by Judas and his followers for rehabilitation because it was a Sabbath, and also because it was the shift-day on which the sacerdotal courses alternated. It was, therefore, rededicated to God, as a memorial of this event, "Look, *at what time and what day* the heathen had profaned it, even *in that* was it dedicated with songs, and cithern, and harps, and cymbals. [1 Macc. I. 54-56]. *Then* all the people fell upon their faces, worshipping and praising the God of heaven, who had given them good success. And so they kept the dedication of the altar *eight days*," i.e. from Sabbath to Sabbath, ay, even from that Sabbath, on Saturday, the twenty-second of December, 165 B. C. (Cal. G), to that disastrous Sabbath, the sixth of August, 70 A. D. (Cal. B), when the Temple was finally destroyed and the degenerate Sabbatarianism of that day was done away with forever.

The Sabbath day thus sanctified continued to be observed 12190 times during the course of the Asmonean-Herodian Era. In other words, it beheld the weekly alternation of the priestly courses on 12190 octaves of this Sabbath. While it can by no means be proven that the two-century-long succession of the holy orders was perpetuated without a break, or without a serious dislocation in the passage of time, the more thoroughly stabilized succession of Sabbatic shift-days can be demonstrated to the echo. There has never been a lapse or interruption in the regular revolution of "seventh" days. The count has been beyond reproach.

The Sabbath-day thus reinstated by the Asmoneans for weekly observance and created a feast of the first magnitude (i.e. on a par with the Passover and Tabernacles, II Macc. I. 8.9), for annual celebration as the Feast of Lights or the Feast of the Dedication, has attained a significance and consequent spiritual force almost unequalled. It has itself been a prime factor in the political as well as religious life of the nation, and has moreover given birth to a power incomparably superior. It has originated Christmas. As the birthday of Him who more than any other man has struck the spark of spiritual illumination, and saying: "I am the Light," has caused a great light to shine in the regions

of darkness. It has brought forth a new sun of righteousness, for on that day Jesus Christ was born, and on that day, at the Feast of Lights, it was that the obscure carpenter prophet first flashed forth as the most illustrious luminary of the religious world.

Therefore, because the Feast of Lights turned out to be the prototype and parent-feast of the Christian Christmas, the greatest and most gracious of all Christian festivals, and whereas, as the birthday of the Central Figure of the chronology adopted in Christian lands, it was immortalized in the fulness of time, and is still, with undying devotion, being memorialized *in* as well as *on* the twenty-fifth of December; therefore, be it resolved that this very day, the twenty-fifth of Apelleus or Casleu, of the 148th year of the Seleucidae, or, in Julian-Roman terms, the twenty-second day of December, J. P. 4549 or 165 B. C., may be appropriately considered the fountain-head of a new era, the starting-point, at any rate, from which all the 85330 days or 12190 weeks of the Asmonean-Herodian Era may be computed, recalculated, or verified. We shall thus, while attempting the reconstruction of the calendar-cycle of the Jewish-Roman Period, in some small measure, do justice to this tremendously momentous date by beginning every calculation or demonstration hereafter from this starting-point, the twenty-fifth of Apelleus (or Casleu), Sel. 148, or the twenty-second of December, J. P. 4549 or 165 B. C.

VOLUME III. CHAPTER III

VICTORY OF JUDAS MACCABEUS OVER NICANOR.

Having taken in the entire terrain of our proposed research in the foregoing calculation, we are now in a position to retrace our steps with a view to testing the truth of the intermediate periods and points of time. To cover the same ground again in this manner has the advantage not only of advancing in a forward direction, just as the stream of time flowed forward in the channels of actual occurrence, but also that of confining the flood of events in their proper chronological channel. Thus, departing from the starting point of Jewish renaissance in J. P. 4549 or 165 B. C., the first date of outstanding importance in our now forward march is the victory of Judas Maccabeus over Nicanor.

This date of Judas' victory over the enemy of his people has been considered so ideal, because so transcendently suitable and serviceable for the purpose of building up the chronology and history of Israel, that it has been styled by Prof. Totten "the key of history." It is, indeed, a determination of time which must be ranked as a synchronization of the first water. Just consider the itemized timing of this event. It occurred near Bethhoron "on the sabbath-day" (II Macc. 15:1—4), "on the thirteenth day of the month Adar," Sel. 151, (1 Maco. 7:43.49; II. Macc. 15:36), "the day before Mardocheus' day," which, as the history of Esther (X. 13 and XIII. 6) records, was "the fourteenth day of the twelfth month Adar." The very pith and marrow of the Maccabean movement, the very point of their polemics, the very trend and tendency of their tactics is lost and unimproved if we fail to perceive the nicety as well as the necessity of this coincidence in the dating of this event. "The gist of the conditions thus imposed upon chronology," says Prof. Totten (in *Our Race*, Series IV, No. 13, p. 82), "is that the thirteenth of Adar, in the 151st year of the Seleucidae (which was a Sabbatic year!) was the Sabbath day, or *Saturday*, as we moderns call it, and the minute agreement with which the True Chronology replies to these requirements is alone sufficient to establish its unique and unimpeachable authority. The fact is we cannot but look upon this date as the most important one it has been our good fortune to spike into its appropriate place. From it alone the entire calendar (Sacred and Secular) of *Our Race*, should it

ever hereafter be lost, can be recovered and worked out, and furthermore may be synchronized to all the Scales of Secular History."

This is by no means overstating the case. We shall show presently, what is indeed obvious enough, that if we deduct a certain number of weeks (say 167) from the total number (12190) in the Asmonean-Herodian Era, we shall have a sum (12023) just as workable and just as worthy of acceptance as the whole which includes it. But we prefer to always employ the larger span of time because it admits of a wider comparison of the nineteen-year cycles (back to the eleventh year of the III. Calippic Period, or 168 B. C.) than a more limited reach could possibly do. Hence we shall go back to the very renaissance of the Jewish Temple service in Sel. 148 or 165 B. C., as the permanent point of departure in all our calculations. Except for the few computations which, as falling into the period of inerrancy, may be more expeditiously and, practically, more safely executed from the end, we shall always consider this the proper and natural point d'appui for all our constructive calculations.

Taking, for instance, the case now before us: From the epochal date of the Temple's reconditioning in Sel. 148 or 165 B. C., we may calculate both the year and the day of the battle of Bethhoron with absolute certainty. If, in view of the awful disparity of opinion even in regard to the *year*-date of this event, it should be considered desirable or necessary to verify the year-location of its date, this may be easily accomplished by the use of the sabbatic principle as a test applied to years as well as to days. The year preceding that which witnessed the victory of Judas Maccabeus is variously described (in 1 Macc. 6: 49 and 53) as "a year of *rest* to the land" and as "the *seventh* year." If, then, the battle of Bethhoron occurred in the first year of a Sabbatic heptad or week of years, the product of years between this point and the year of the destruction of Jerusalem in 70 A. D., which is intimated by history and tradition to have happened in a Sabbatic year (see Josephus and Talmud Seder Olam), must be a multiple of seven. But $161 + 70$ (or $381 - 150 =$) $= 231$, or 33 sevens. Consequently 161 B. C. is the correct YEAR for the battle of Bethhoron, for it followed in immediate sequence to a Sabbatic year.

Another way of approximating the location of the battle of Bethhoron is by means of the Roman consulships. In the year 148 of the kingdom of the Greeks, two Roman ambassadors; Quintus Memmius and Titus Manlius, sent greetings to the people of the Jews (II Macc. XI. 34). One of these was a consul. He was consul in the year of Rome 587 according to the Capitoline Marbles, which corresponded to the year Sel. 148 or 165 B. C.

That Titus Manlius Torquatus officiated in 165 B. C., and not one year earlier or two years later, as claimed by certain classes of chronologists, is evident from the fact that this consulship is the third from that of L. Aemilius Paullus II and C. Licinius Crassus in 168 B. C., and that is a date which cannot be moved. The third year, then, or "three years" (II Macc. 14:1) after the consulship of Titus Manlius will bring us to the consulate of P. Cornelius Scipio Nasica and C. Marcius Figulus in A. U. C. 591, whose term of office extended from the fifteenth of March, 162 B. C., to the fifteenth of March, 161 B. C.

<i>Sel.</i>	<i>A. U. C.</i>	<i>Consuls.</i>	<i>Nab.</i>	<i>J. C. or B. C.</i>
145 ⁸	585	L. Aemil. Paullus II and C. Licin. Crassus	580 ¹³	4546—168
146 ⁹	586	Q. Aelius Paetus; M. Junius Pennus	581 ¹⁴	4547—167
147 ¹⁰	587	C. Sulpitius Gallus; M. Claudius Marcellus	582 ¹⁵	4548—166
148 ¹¹	588	T. Manlius Torquatus; Cn. Octavius	583 ¹⁶	4549—165
149 ¹	589	A. Manlius Torquatus; Q. Cassius Longinus	584	4550—164
150 ²	590	Ti. Sempron. Gracchus II; M'. Juvent. Thalma	585	4551—163
151 ³	591	P. Corn. Scipio Nasica; C. Marcius Figulus	586	4552—162 4553—161

Almost at the expiration of the last Roman consulate, in the late winter or about the break of spring, occurred the famous encounter which, indeed, did not cause the sun to stand still in the midst of heaven, but did create a notable date in Hebrew history which, for calendric conclusiveness can scarcely be equalled and in no wise excelled. It cannot be placed anywhere else than in the primetime of 161 B. C., when "*after three years* Demetrius had taken the country and, at the instigation of Alcimus, had made Nicanor governor over Judea, charging him to slay Judas, and to scatter them that were with him" (II Macc. 14:1. 4. 12. 13).

But the simplest as well as the most decisive way of ascertaining the exact location of this famous repetition of history is that by means of the Seleucic scale of years and the Sabbatarian system of seven-day periods. Employing the express figures of this great era, the data may be briefly stated thus.

The battle of Bethhoron took place, according to *I Macc.* 7:1 and *II Macc.* 14:3 after an interval of "*three years*" from the reinstatement of the temple service "*in the hundred and one and fiftieth year*" of the kingdom of the Greeks. It was the 151st year of the Seleucidae, whether computed from the vernal or the autumnal commencement of the year, i.e. sacred or secular; for it happened on "the thirteenth of Adar," according to 1 Macc. 7:49, or, on "the thirteenth day of the twelfth (XIIth) month, which in the Syrian tongue is called Adar, the day before Mardocheus' day," according to II Macc. 15:36. But in both modes of reckoning, the sacred and the secular, the thirteenth day of

Adar is located in those sections of the two collateral systems of calculation which overlap each other, are never distinguished from each other, and can only tend to corroborate and confirm each other.

And, not content with this distinct definition of time, to cap the climax, the date is crowned with the precise description of the week-day character of the triumphal day in II. Macc. 15:1-4. "But Nicanor, hearing that Judas and his company were in the strong places about Samaria, resolved without any danger to set upon them *on the sabbath day*. Nevertheless the Jews that were compelled to go with him said, O destroy not so cruelly and barbarously, but give honour to *that day which He* that seeth all things, *hath honoured with holiness above other days*. Then the most ungracious wretch demanded, if there were a Mighty One in heaven, that had commanded *the sabbath day to be kept*. And when they said, There is in heaven a living Lord, and mighty, who commanded *the seventh day to be kept*. Then said the other, And I also am mighty upon earth, and I command to take arms, and to do the king's business."

Accordingly, no calendar reconstruction-work can be accepted as correct which does not convey all the elements of time-reckoning afore-mentioned like a smooth running stream, in such a way as to deliver *the thirteenth of Adar, Sel. 151, on a Sabbath or seventh day* of the week. It is now our province and pleasure to deliver the goods:

<i>Sacred Cal.</i>			<i>Secular Cal.</i>	
14. Sel. 148	93 days		Sel. 148	270 days [93+177]
15. Sel. 149	354 days		Sel. 149	354 days
16. Sel. 150	384 days	[354+30]	Sel. 150	384 days [354+30]
17. Sel. 151	338	[354-16]	Sel. 151	161 [177-16]
<hr/> 1169			<hr/> 1169	

Now, if we convert the sum total of days contained in the period from the dedication of the Temple in Sel. 148 to the victory of Judas over Nicanor in Sel. 151 into weeks by dividing 1169 by seven, what result may we expect to emerge by this division? Clearly this; that the remainder, if any, will indicate the character of the last day included in this number. But 1169 divided by seven yields 167 full weeks without remainder: consequently the last day of this number rounds out a full week, leaving the unmistakable inference that this last seventh day was what the Jews called a "Sabbath," and the Gentiles a "Saturn's day." There is no power on earth capable of changing this result, nor is there any way of altering it, unless it can be done by removing, multiplying or otherwise modifying one or more of the factors. Can a mutation be effected in the result in this way?

The circumstance that, in the second book of the Maccabees, the letter of Lysias, the lord protector of the infant prince, Antiochus Eupator, is grouped with the letters of king Antiochus and the Roman ambassadors, has led many chronologists to suppose that "Dioscorinthius" was nothing else than a second month of Adar, the thirteenth month of the year known in modern Jewish almanacs as "Ve-Adar." That this cannot have been the chronological site of the intercalary month may clearly be discerned from the monthly aspect of the year. Take the lunations of any year of a lunar cycle,

164 B. C.	1914 A. D.
[Dec. 28, 165 B. C.]	[Dec. 27, 1913 A. D.]
Jan. 27	Jan. 26
Feb. 25	Feb. 24
Mar. 27	Mar. 26
Apr. 25	Apr. 25

Then figure out for yourself where another month of intercalation would land you! Do you not see that, if you assign the space between the twenty-seventh of December and the twenty-sixth of January to Tebeth, the space between January twenty-sixth and February twenty-fourth to Shebat, the space between February twenty-fourth and March twenty-sixth to Adar, and the only space left between March twenty-sixth and April twenty-fifth to *Ve-Adar*, you will have crowded Nisan out of its proper place and misplaced the Passover in the midst of May?! Or, if you consent to leave the Passover month in its rightful place in the zodiac, you will have to dislodge the feast of Lights (or Dedication) out of December and transport it into the month of November?! For neither of these violent ejections, have we a vestige of authority! And if we had, *how* would we dispose of the greater difficulty of reconciling the false factors of this new problem with the figures of the priestly periods?

The easiest, quickest and best way of dealing with the situation is that which most consistently agrees with all the calendric conditions. In the first place, the complementary month Dioscorus or Dioscorinthus must be included in the civil year 148, *after* the month Hyperberetaeus or Tisri, indeed, but *before* the month Xanthicus or Nisan (cf. II Macc. 11:38). According to the Macedonian method, it was inserted between Hyperberetaeus and Dios, or between Dios (Chesvan) and Apellaeus (Casleu). Froelich has shown that the Macedonian intercalary month was placed after Hyperberetaeus, and Clinton agreed (see *Fasti Hellenici*, Vol. III, p. 349 notes) that it followed Hyperberetaeus and preceded Dios. At any rate, the Hebrews accounted Hyperberetaeus the seventh month of the sacred, and the first month of the secular or civil year, and Dioscorus followed in the wake of it.

In the second place, it is a matter of internal probability that if the letter of Lord Lysias was indited on the twenty-fourth of Dioscorinthius and despatched to the Jews immediately, delivering them from the fear of molestation and encouraging them to think of the works of peace, such as the restoration of the temple and the re-establishment of the divine service, they must have received this very conciliatory letter sometime, in fact, some considerable time before the feast of Dedication, which was always in the month of Casleu. As a matter of actual occurrence, the Jews had already before this received a very gracious epistle from Antiochus Epiphanes the father of the infant prince, before he "died a miserable death in a strange country in the mountains" (II Macc. 9:28) That must have been in the summer of Sel. 147 (secular) or 148 (sacred), for no king, in those days, would think of waging war in the winter-time. If then, the "illustrious" king, defeated in his summer campaign in the highlands of Upper Asia, died in the month Hyperberetaeus or Tisri in the autumn of 165 B. C., his infant son must have been set up as his successor by Lysias (I Macc. 6:17), in the immediately succeeding month Dioscorus or Dioscorinthius, in order to make it possible for Lysias to write his letter on the twenty-fourth of that month (II Macc. 11:21), and for king Antiochus to dictate his own epistle on the birthday of Jewish nationality, the fifteenth of Xanthicus or Nisan, both in the 148th year of the secular seriation of the Seleucic Era. If, then, as we surmise, the true order of the twin-months inaugurating the secular year Sel. 148 was Dioscorus, first and then Dios, we have an arrangement free from exception and so acceptable because of its patent harmony with historical facts.

Accordingly, there remains but one thing to be seen in the process of this examination, whether (as we are bound to expect) there will emerge from the probe a product compatible with our expectations, or whether it will fail to materialize. The test is a simple example in arithmetic. First, add together the days contained in the interval between the twenty-fifth of Casleu, Sel. 148, and the thirteenth of Adar, Sel. 151, and then divide by seven to obtain the description of the week-day represented by the last day of the sum.

	Casleu 25th = 0	356 = Dec. 22, 165 B. C. Cal.
	{ Casleu 5 5	+ 93 d. in Sel. 148.
	{ Tebeth 29 29	—
14.) Sel. 148 =	{ Shebat 30 30	449
	{ Adar 29 29	—365 d. in 165 B. C.
	<hr/>	<hr/>
	93	84

15.) Sel. 149 =	354	+354 d. in Sel. 149
		<hr/> 438
		-365 d. in 164 B. C.
	<hr/> 447	<hr/> 73
	207	384 d. in Sel. 150
16.) Sel. 150 =	<hr/> 30	<hr/> 457
	147	-365 d. in 163 B. C.
	<hr/> 831	<hr/> 92
17.) Sel. 151 =	354	354 d. in Sel. 151
		<hr/> 446
		-366 d. in 162 B. C.
	<hr/> 1185	<hr/> 80
	- 16	- 16 d. in Adar 14-29
	<hr/> 7)1169	<hr/> 64 = Sat.,
	1169	March fifth, 161 B. C.
	<hr/> 167+0	

Upon eliminating the last sixteen days of Adar, which do not enter into the problem, (viz. $1185 - 16 = 1169$), we learn to appreciate the discretion of Judas Maccabaeus to fight even on the Sabbath day, for $1169 \div 7 = 167$ weeks, without a remainder, proving with its splendid spontaneity the naturalness and fascinating correctness of the ancient Jewish calendar. And, deducting the same number sixteen from eighty, the last day of Adar in terms of the Julian calendar, we are assured that the sixty-fourth day of the year 161 B. C. was the fifth day of March, was a Saturday because this year began with a Saturday and ended with a Saturday ($64 \div 7 = 9 \times 7 + 1$), and was marked with the dominical letter B indicative of this fact.

Aside from the fact made apparent by this little example in arithmetic, that we do not base our conclusions as to the sabbatarian character of Adar thirteenth, Sel. 151, or March fifteenth, 161 B. C., on the erroneous calendar-cycle constructed by Prof. Dimbleby (see *All Past Time*, p. 85) nor on any of Prof. Totten's systems (see *Our Race*, Series III, No. 10, p. 167), we differ from Prof. Totten yet in another respect, viz. that we do not consider this consummately significant date as the one supremely conspicuous Sabbath-day, preeminently adapted to the purpose of building up a calendar, but as one out of a thousand Sabbath-days [$85330 \div 7 = 12190$ in the Era], all of which might serve precisely in the same manner as a touchstone to the correctness of chronology or calendar construction. It is not any one particular Sabbath-day, but the Sabbatic principle underlying the case, that is the open sesame of Jewish history, regardless of the dogma or the sentiment involved in each instant. Without entering

into a discussion of the sabbatarian question either as a political or religious issue, we cannot help contrasting the sane and noble sanctity of the day in early times with the unsound sanctimoniousness of Sabbath-worship near the end of Jewish nationalism. Mattathias and his followers made the decree that "whosoever shall come to make battle with us on the sabbath-day, we will fight against him." (I Macc. 2:41) John of Giscala lectured the Roman general and future emperor of Rome, as Josephus reports (*Wars*, B. IV. C. II. §3), "that Titus ought to have such regard to the Jewish law, as to grant them leave to celebrate that day, which was the seventh day of the week, on which it was unlawful not only to remove their arms, but even to treat of peace also." To chronologists as such it is a matter of indifference whether the decree of the Asmoneans or the sentiment of the Pharisees be endorsed, so long as the matter of fact recorded was enacted on the Sabbath, as represented. The Sabbath principle works equally well whether it is honored in the breach or disgraced in the observance.

If we may be permitted to add another word by way of calling attention to a fact, no doubt, already observed and noted, since it exhibits itself with a promptness and naturalness truly charming, it is this, that the zone of cyclical years comprising this particular subordinate period sweeps broadly and comprehensively over precisely that stretch of this and every other nineteen-year lunar cycle which is bound to include the ultimate objective of all our computations, the time-determination or date of the crucifixion of Jesus Christ. This is the third time we cover the same segment of the cycle in three distinct and separate instances. This triple repetition of the same result ought surely to carry with it the reiterate assurance that the truth has been discovered. For the third time, then we have ascertained the fact that, in the broad belt comprising the twelfth, thirteenth, fourteenth, sixteenth, seventeenth, eighteenth, and nineteenth years of every nineteen-year lunar cycle, there is neither chance nor call for the intercalation of a single additional day. There is room, indeed, for a thirty-day complement in the fourteenth and sixteenth as well as in the nineteenth years, and that invariably in the fall of the year, but, so far as an interpolation of Badhu or any other additional day is concerned, for the purpose of shifting a date or of swaying the straightforward course of the calendar in this zone, there is not an atom of ground for the belief that this was ever practiced before the composition of the Talmud or the construction of the modern Jewish calendar. The triple testimony of historical test-cases delivers an inhibition against the practice of arbitrarily interpolating a corrective or commutative additional day with the emphasis of finality. As there is no evidence

at hand that a single day was omitted from each and every Calippic Period (as should have been done) for the lawful purpose of equating the theoretical form with the astronomical facts, so there is no evidence whatsoever that a one-day intercalation ever occurred in the second half of the nineteen-year lunar cycles of the Calippic Period. We shall have another occasion to test the truthfulness of this assertion, as we examine the date of a Passover which also fell into line with others in the same zone, viz. the Passover attended by Jesus and His parents when He was twelve years old. In the meantime we shall direct our attention to the upper half of the nineteen-year cycles, in the endeavor to locate the historical sites of the four extra intercalary days required to complete a cycle of 4960 days.

To facilitate the task of computing the serviceable dates to be found in the intermediate period, we shall, once for all, compute the number of days contained in that part of the first nineteen-year cycle of the IIIrd Calippic Period which remains as its residue after the date of the reconsecration of the Temple on the twenty-fifth of Apelleus or Casleu, Sel. 148. The number is 1923. Adding together the usual number of days attributed to a common lunar year,

354 for (19+)	Sel. 153 (sacred).
354 for (18.)	Sel. 152 (sacred).
354 for (17.)	Sel. 151 (sacred).
354 for (16+)	Sel. 150 (sacred).
354 for (15.)	Sel. 149 (sacred).
93 for (14)	Sel. 148 (sacred).

1863

not forgetting to add two intercalary months of thirty days each, we obtain the sum of $1863 + 30 + 30 = 1923$ days. As at least half of this segment of a cycle cannot be augmented or diminished by a single day, as so clearly demonstrated by the date of Nicanor's defeat by Judas Maccabeus, and whereas there is no call for the insertion of a day in the rest of the segment, we may safely cite the balance of this nineteen-year cycle as consisting of 1923 days in any future computation.

VOLUME III. CHAPTER IV

THE SABBATH-PENTECOST OF JOHN HYRCANUS

The next available test-case which it is our privilege to probe and apply to the upbuilding of the Jewish or Syro-Macedonian calendar is an instance of time-determination so markedly plain and so manifestly decisive in its bearings, that Dr. Karl Wieseler interrupts his argument on the subject to say in parenthesis "And on this indeed all the succeeding calculations entirely depend." We would not say quite as much, but, as we shall see, a great deal does, indeed, depend on the testimony of this particular date, which so significantly seems to specify the time when the Jewish auxiliaries of king Antiochus Sidetes halted in their march and *for two days* literally "marked time." It is true, Nicolaus of Damascus, Josephus' authority for this incident, relates only in a general way that, "when Antiochus had erected a trophy at the river Lycus, upon his conquest of Indates, the general of the Parthians, he stayed there *two days*. It was at the desire of Hyrcanus the Jew, because it was such a festival derived to them from the forefathers, whereon the law of the Jews did not allow them to travel." But the demarkation, regardless of whether it places the festival before or after the Sabbath is valuable and well worth investigating. In spite of its seemingly indefinite character, it is a conjuncture which can happen only once or twice in a decade, and can therefore be limited to a certain year if that is anyway described in definite terms.

The year in which this notable incident occurred has been very diversely determined by various authorities. "Wurm," [a prominent German astronomer], says Dr. Wieseler (p. 439), "without wishing, in the midst of such variety of opinion, to declare decidedly in favor of any particular year, has, according to the method adopted in his calculations, arrived at the fifteenth of Nisan, 131 B. C., the year in which Riccioli among others has placed the Pentecost in question." Dr. Wieseler himself felt justified in affirming, in the text of his book, "that the Pentecost which we have to determine more accurately occurred in 130 B. C.," congratulating himself on the head of it that he could "adduce the authority of such men as Niebuhr and Anger in support of this view." Over against this positive conviction of Dr. Wieseler, Fynes Clinton, a high authority in secular and sacred chronology, assigns the consulship of Caius Sempronius, in whose term the Pentecostal episode is supposed to have hap-

pened, to J. P. 4585 or 129 B. C., while Dr. Gustav Seyffarth and others of his school, who place all occurrences of ancient history two years later than registered in the commonly accepted system, concentrate their views on J. P. 4586 or 128 B. C. Who, then, shall decide when doctors disagree? Evidently the context of history must pronounce the verdict as to the fact.

In the *Epitome* of his *History* (B. LIX), Livy connotes the incidents of that consular year in the following manner: "War between Antiochus, king of Syria, and Phraates, king of Parthia. Commotions in Egypt. Ptolemy, surnamed Euergetes, detested by his subjects for his cruelty, etcetera, . . . Caius Sempronius, the consul, fights the Iapidae, at first unsuccessfully, but soon repairs all his losses, by a signal victory, gained chiefly by Junius Brutus, the conqueror of Lusitanea." In the curt outlines of this memorandum, we have the three principal lines of argument which may, tentatively at least, decide the question now before us. We shall therefore draw our conclusions, first from Egyptian affairs, second from Roman affairs, and third from Syrian and Jewish affairs. To cap the climax, we shall then add deductions derived from astronomy or interplanetary affairs.

In the *first* place, it will be observed that the war between the Syrian king and the Parthian chief occurred shortly before the commotions in Egypt came to a head and resulted in a definite change of government. The convulsion in Egyptian affairs referred to took place in Nab. 618 or 130 B. C. Having endured the tyranny of Ptolemy Euergetes II. for fifteen years, as Diodorus has it (X. p. 79), from the day "king Ptolemee died" (I Macc. XI. 19) in the 167th year of the kingdom of the Greeks, sometime before the civil year 167 Sel. closed and before Sel. 168 began, in the late summer or autumn of Nab. 603 (or 145 B. C.), the people at length rebelled against him, as Orosius says (V. 10) in the consulship of M. Perperna, A. U. 623 or 130 B. C., expelling him, as Livy intimates, in the sixteenth year of his reign, which therefore tallied with the consular term of Caius Sempronius and M'. Aquilius. If, then, the fifteenth year of Ptolemy Euergetes, also called Physson, ended with the summer of Nab. 617 or 131 B. C., and the sixteenth commenced in the autumn, or, as Clinton (III, p. 389) would have it, "at the close of 131 B. C.," it follows that the revolution in Egypt culminated in the late summer of the consulate of M. Perperna, 130 B. C., and the Jews in the Syrian king's army refused to march or engage in any active service on holidays in the spring of the following consulship, the term of C. Sempronius in 129 B. C. But $\text{Sel. } 167 + 16 = 183$, Nab. $603 + 16 = 619$, and B. C. $145 - 16 = 129$ B. C. Hence we are justified in concluding from the trend of Egyptian affairs that, since the commotions in Egypt attained their climax in the

consulate of M. Perperna in 130 B. C., and the war between Antiochus and Phraates was waged in the consulate of C. Sempronius in 129 B. C., the only Pentecost season in which a body of Jewish soldiers could possibly have enjoyed a two days' reprieve from active service was the spring of J. P. 4585 or 129 B. C. Whether the week-day characteristics of this Pentecost come up to historic and chronological requirements remains to be seen, but the trend of Egyptian affairs points positively to this year.

The same conclusion may be drawn, in the second place, from the concurrent stream of Roman affairs, and from the succession of Roman consulates in particular. The first couple of consuls to be mentioned in the present instance is the pair indicated by I Macc. XV. 10.16, where the apocryphal author names a consul "*Lucius*" in the diplomatic relations of Sel. 176 or 136 B. C. The only consul called "*Lucius*," even in error, within a radius of five years, was Lucius Furius Philus, associated in the consulate of A. U. C. 617 with Sextus Artilius Seranus. Assuming, then, that this is the consulship in which the events of Sel. 174 transpired, we will see that the consular term of C. Sempronius is the seventh in order thereafter: in other words the Parthian campaign of Antiochus VII and Hyrcanus, his confederate, took place in the seventh year after the letter of Lucius, consul of the Romans, was conveyed to king Ptolemee of Egypt, in Sel. 176+7=183, or B. C. 136-7=129 B. C. Or, reckoning backwards from another Roman consulate brought into scintillating contact with Oriental affairs, the consulate of Quintus Metellus in A. U. C. 630 (according to the Capitoline Tablets), we find that, from this consulate, the consulship of C. Sempronius was the sixth term of office, the former enumerated in the 630th year from the foundation of Rome, the latter just as expressly enregistered in the 624th year A. U. C. (according to the official count of the Capitoline Marbles). The second consulate before that of Quintus Metellus in A. U. C. 630 is that of M. Plautius Hypsaeus and M. Fulvius Flaccus, proven to be correctly placed, not only by its registration according to the Capitoline computation, but by its correspondence with the archonship of Jason at Athens, in the fourth year of the 163rd Olympiad, and therefore in consonance with the 4589th year of the Julian Period or 125 B. C. The third consular term preceding that of Quintus Metellus is again distinguished by its rigid enumeration in the official Capitoline count, leaving only two terms between the third and sixth not expressly numbered. The consulate of C. Sempronius, therefore, cannot be wrongly placed when located in A. U. C. 624, J. P. 4585 or 129 B. C., and the experience of John Hyrcanus in the Parthian campaign of king Antiochus cannot be wrongly placed when located in this twelvemonth as the consulate of C. Sempronius.

It is not so much our conclusion that it may be so, as it is the decree of sound chronology that it must be so.

In the third place, the same result may be reached by a resume of Syrian and Jewish affairs. Not to rehearse the entire history of the internecine warfare between the rival branches of the royal house of Seleucus, we shall start out from a point of contact chronologically well-established and incontestable. In unmistakable terms, we are told (I Macc. XVI. 14) that Simon, the high priest and prince of Israel, in visiting the cities that were in the country, and taking care for the good ordering of them, came down to Jericho with his sons, Mattathias and Judas, *in the hundred three score and seventeenth year, in the eleventh month, called "Sabat."* and was there slain by Ptolemeus, his treacherous son-in-law. Now "the eleventh month," being expressly mentioned by name "called Sabat," cannot by any possibility be reckoned any other month than the lunation ordinarily falling into that part of the Syrian year which is stationary and stabilized, whether the twelvemonth be treated as retroactive, as here, making this month the *eleventh* from the spring opening in Nisan: or whether it is handled historically as the *fifth* from the secular autumnal beginning in Tisri [Sept.-Oct.]. The eleventh month "Sabat" can be nothing else than the Syro-Macedonian month Peritius of the 177th year of the Seleucidae (sacred or secular) which coincided with the 4579th year of the Julian Period or the 135th year before the beginning of the Christian Era.

In this year, then, it was that the son and successor of Simon, in the pontificate and principality of Israel, John Hyrcanus, began his term of office. It was in the summer following the month of "Sabat" just defined. We know that his initiation as supreme pontiff preceded the beginning of a Sabbatic year as certainly as summer preceded the autumn of that year. Whether, therefore, we take this year as the twenty-seventh after the first "*seventh* year" or "year of rest" mentioned in the Asmonean-Herodian Era, viz. $150 + 27 = 177$, or as the 205th from the end, 204 years before the final year of rest for the people of Israel, J. P. $4783 - 204 (70 + 134) = 4579$, or Sel. $381 - 204 = 177$, the year of the kingdom of the Greeks 177 was a sixth year, or second last of a hebdomad, whose winter-months maintain their position undisturbed in the ephemeris of nature, regardless whether the years be reckoned hieratically from Nisan to Nisan, as in the latter period, or from Tisri to Tisri, as in the former. In every exigency of the case, the pontificate of John Hyrcanus began shortly after the assassination of his father in the month enumerated as the "eleventh" (making the count retroactive) and de-

nominated "Sabat" (I Macc. XVI. 14, proving the Jewish characteristic of the count).

In the summer, then, of J. P. 4579 or 135 B. C., with his priesthood and his principality just begun, John Hyrcanus set himself to besiege his perfidious brother-in-law, Ptolemy, in the fortress above Jericho called Dagon, but gave up the siege when "that year on which the Jews use to rest came on." (Jos., *Ant.*, B. XIII. C. VIII. §1) This "sabbath" of years was religiously kept in their count, if not as conscientiously observed in fact. Hence the historian relates that, in the sixth month of Sel. 178, or in the spring of 134 B. C., there was a tropical shower of rain, "which fell at the setting of the Pleiades" (i.e. either in the earlier or the later part of spring, February or April respectively), at such an auspicious conjuncture that it was considered a providential deliverance of the beleaguered from a great want of water (Jos. *Ant.*, B. XIII. C. VIII. §2). This intervention of divine providence occurring in the interval between the beginning of the year of rest in 135 B. C. and the observance of a feast of Tabernacles in the month Tisri, it is obvious that this celebration pertained to the fall of 134 B. C. or the autumn of J. P. 4580. It must, therefore, have been a *second* feast of Tabernacles in this two-year period of siege and beleaguerment, encompassed by the manoeuvres of the siege by the Syrian king that constrained John Hyrcanus to send an embassy to king Antiochus, and to "desire there might be a truce *for seven days* because of the festival." In other words, what is here represented as a bid for cooperation in the observance of a festival, is in reality a capitulation of friendship and comradeship in arms camouflaged into a religious ceremony. The political as well as religious independence of Hyrcanus, so pompously proclaimed "in the first year of Simon the high priest, the governor and leader of the Jews" (I Macc. XIII. 42), is apparently no longer to be seen. It is no longer evident, but, in its place, we see a state of subordination, a condition of fealty to the king of Syria, which John Hyrcanus, the son of Simon, was bound to recognize and live up to. Hence his presence in the following of Antiochus in the campaign against Parthia.

We may now agree with Dr. Wieseler (*Synopsis*, p. 438) that "there is not a word in the context of Josephus to tell us that the latter expedition—the invasion of Parthia by Antiochus VII, on which he was accompanied by Hyrcanus as an ally—followed the former in the very next year, but the contrary is rather implied." The apparent reluctance and backwardness with which the defeated prince of the Jews rifled the tomb of David and remitted the loot to the rapacious conqueror implies an intermission, not of weeks, but of months. It even looks as if the remiss high-

priest needed a gentle urge with the point of a lance during the interval to turn over the reclaimed treasure with more alacrity. This second call of the Syrian king would fall somewhere in the intervening twelvemonth, Sel. 181 or 132 B. C. But that which removes every vestige of doubt as to the correct date of the allies' joint expedition into Parthia is a little bit of diplomatic correspondence preserved by the Jewish historian in the next book of his *Antiquities*. There, describing the mission of the messengers despatched by the Jewish prince and priest to the senate and people of Rome, he says: "Fanius, the son of Marcus, gathered the senate together *on the eighth day before the Ides of February* [February sixth], in the senate-house, when Lucius Manlius, the son of Lucius, of the Mentine tribe, and *Caius Sempronius*, the son of Caius, of the Falernian tribe were present. The occasion was, that the ambassadors sent by the people of the Jews, Simon, the son of Dositheus, and Apollonius, the son of Alexander, and Diodorus, the son of Jason, who were good and virtuous men, had somewhat to propose about that league of friendship and mutual assistance, which subsisted between them and the Romans, and about other public affairs," etcetera. (*Antiq.* B. XIII, C. IX. §2.)

It lends itself to an easy ratiocination that, if the embassy here referred to fell into the February of the consulship of Caius Sempronius, and this mission followed in immediate sequence to the Parthian expedition during the same consulship, it follows that the February spoken of in the document was the second month of the Julian year J. P. 4586 or of the ante-Christian era 128 B. C. For if, as has been shown (p. 308), the bulk of the consular year (reckoning *a Parilibus*), coincided with J. P. 4585 or 129 B. C., then the balance of it must of necessity have corresponded to the first quarter of J. P. 4586 or 128 B. C. That being the case, we may draw, vice versa, the infallible inference that, if the date of the Roman praetor's epistle is unalterably fixed to the beginning of 128 B. C. or J. P. 4586, then the Sabbath-Pentecost holiday observed by the Jewish auxiliaries of king Antiochus transpired in the spring of the Sempronian consulate, as reported, in J. P. 4585 or 129 B. C. It then becomes apparent why John Hyrcanus, in the same year, Sel. 184 (sacred or secular), when Antiochus lost his life and realm, should seek to regain his freedom and independence from Syria through the influence and assistance of the Roman people. With the favor and power of Rome secured, this politic high-priest and prince expected prosperity and peace to settle down on his own dominion. To this end he followed up his unwilling participation in the Parthian campaign with a delegation to Rome in the fall and winter of the consulship of Caius Sempronius in J. P. 4585 or 129 B. C.

In the fourth place, and with the emphasis of finality, we may settle down to the same conclusion from a survey of the interplanetary affairs of the world, that is to say, from a consideration of the calendar-creating courses of the sun, moon, and earth, which go to make up the elements of time. While not to be set forth as a perfect astronomical prospectus of the period in question, a consistent presentation of what the Jewish or Syro-Macedonian calendar-cycle looked like during that particular decade will visualize and depict to the student's scrutiny what year among them all may, and which may not, by any possibility be taken into consideration, even for a moment.

Assuming at the outset no catastrophal change occurred in the evolution of the quasi-Calippic cycle at this time, we may picture to our minds the contour of the years from 178 to 187 Sel., in this fashion. Enumerating the days from the twenty-fifth of Apelleus or Casleu, 148 Sel. (excl.), the beginning of the Jewish-Roman Era, to the end of Sel. 177, reckoned theoretically, or theocratically, if you will, from Xanthicus or Nisan as the first month of the Hebrews' sacred year, no matter how the intercalations are disposed, the sum total of $(177 - 148 =)$ 29 years of 354 days, ten embolismic months of thirty days each, and seven extra intercalary days of a bissextile or leap-year character, amounts to 10,666 days. Or, compiling the sums by the cycles they represent, we have:

		Sel. 177
		— 172
		<hr/>
		345½ ²⁵
		<hr/>
Cal. Per. III ¹ = Sel. 148 — 153 = 1923 d.		1770
Cal. Per. III ² = Sel. 154 — 172 = 6940 d.		30 d. int. m
Cal. Per. III ³ = Sel. 173 — 177 = 1803 d.		3 d. extra Int.
	<hr/>	<hr/>
	10666 days	1803

Accumulating, in like manner, the day units according to the Julian calendar from December twenty-second (exclus) or December twenty-third (inclus.), 165 B. C., to the end of December, 136 B. C., the sum total of $(165 - 136 =)$ 29 Julian years of 365 days, together with seven leap-year days, and the nine days' residue in 165 B. C., amounts to 10601 days, leaving a difference of ninety-five days, indicating the interval from the beginning of J. P. 4579 or 135 B. C. to the beginning of the next Jewish year, Sel. 178, on the sixty-sixth day of the Julian year. Adding the constituent units of each year, as we go along, both to the grand total of days preceding this date in the Era and to the annual precedence of the Julian year's beginning before that of the Jewish year, we obtain the status of the Jewish calendar

year by year, and, adding to each final the component parts of the Pentecostal season [Nisan 30 + Iyar 29 + Sivan 6 =] 65 days, we obtain the date of each Pentecost in each year. A division of the grand total of days in the Era by seven will furnish the number of weeks in the Era up to date and, at the same time, indicate the week-day character of the remainder. A consultation of the Julian calendar supplied with the Sunday or dominical letters will complete the identification and endorsement of each Pentecostal date, thus enabling anyone competent to put two and two together to form his own opinion. Proceeding, then, to carry out this simple process of arithmetic, we reach results as follows:

Sel. 177	164 B. C.
— 148	— 135 B. C.
<hr/>	<hr/>
354 × 29	365 × 29
<hr/>	<hr/>
3186	3285
702	730
<hr/>	<hr/>
10266	10585
300 d. in 10 emb. mos.	7 l. y. ds.
7 d. extra intercal.	
<hr/>	<hr/>
10573	10592
93 d. in Sel. 148.	9 d. in 165 B. C.
<hr/>	<hr/>
10666 days	10601 days

Deducting the number of days in the Julian calendar [10601 ds.], viz. from December twenty-second, 165 B. C. (excl.) to December thirty-first, 136 B. C. (incl.), from the number of days in the Jewish calendar [10,666 ds.] viz. from the twenty-fifth of Apelleus or Casleu, 148 Sel. (excl.) to the end of the sacred year Sel. 177, to obtain the serial day of J. P. 4579 or 135 B. C., we have:

$$\begin{array}{r} 10666 \text{ ds.} \\ -10601 \text{ ds.} \\ \hline \end{array}$$

$$\text{Adar twenty-ninth} = 65\text{th ds. in } 135 \text{ B. C.}$$

In working out this process, it is no more than right that we should first try out the plan of balancing lunar with solar time, which we have found to be the underlying principle of the Calippic nineteen-year cycles in and during the period of the Jewish War. We have already seen that, while the order of intercalating the years of the cycle in the period of renaissance, Sel. 148 to 153, corresponds with that of the Jewish war period, 66 to 70 A. D., in that the intercalation of months was effected in the fourteenth, sixteenth and nineteenth years of the cycle, there was a slight

difference in the mode and locality of intercalation, in that the intercalary month of Dioscorus was inserted immediately before Dios in the renascent period, while the month Ve-Elul was injected immediately after Elul in the period of decadence. It now remains to be seen whether the intercalary system of Calippus is consistently observed in the intermediate cycles or not. Equating the 10666th day of the Jewish-Roman or Asmonean-Herodian Era, Adar twenty-ninth, 177 S. E., with the sixty-fifth day of the Julianized Roman year, J. P. 4579 or 135 B. C., the sixth of March), we work out the problem like this:

		<i>Jewish.</i>	<i>Julian</i>		
10666		10666 =	65	E	65
+ 65		$\left\{ \begin{array}{r} 236 \\ 30 \\ 118 \end{array} \right\}$	+384 d. in Sel. 178.		+65
7)10731	6. Sel. 178 =		449		130 =
1533+0		11050 =	-365 d. in 135 B. C.		Sat., May 10th
11050			84	DC	84
+ 65			+354 d. in Sel. 179.		+65
7)11115	7. Sel. 179 =	+354	438		149 =
1587+6		11404 =	-366 d. in 134 B. C.		Fri., May 28
11404			72		72
+ 65		$\left\{ \begin{array}{r} 236 \\ 30 \\ 118 \end{array} \right\}$	236	B	+65
7)11469	8. Sel. 180 =		+ 30 d. in 180 Sel.		137 =
1638+3		11788 =	456		Tues., May 17
11788		0	-365 d. in 133 B. C.		
+ 65		354	91	A	91
7)11853		12142 =	0		+65
1693+2			+354 d. in Sel. 181.		156 =
12142	10. Sel. 182 = +	354	445		Mon., June 5
+ 65			-365 d. in 132 B. C.		
7)12207		12496 =	80		80
1743+6		$\left\{ \begin{array}{r} 30 \\ 1 \end{array} \right\}$	+354 d. in Sel. 182	G	+65
12496			-365 d. in 131 B. C.		145 =
30					Fri., May 25
1} 66 d.	11. Sel. 183 = +	$\left\{ \begin{array}{r} 206 \\ 30 \\ 118 \end{array} \right\}$	69	FE	69
29			30		30
6}			1		1
7)12562		12881 =	206 d. in Sel. 183		29
1794+4			30		6
			118		135 =
			454		Wed., May 14
			-366 d. in 130 B. C.		

		<i>Jewish.</i>	<i>Julian.</i>			
12881	12. Sel. 184 = +	354	88	D	88	
+ 65			+354 d. in Sel. 184		+65	
7)12946			442		153 =	
			-365 d. in 129 B. C.		Tues., June 2	
1849+3			77		77	
13235	13. Sel. 185 = +	354	+354 d. in Sel. 185	C	65	
+ 65			431		142 =	
7)1300			-365 d. in 128 B. C.		Sat., May 22	
1900+0			66			
13589			263		66	
+ 65			30	d. in Sel. 186	B	65
7)13654		13589 =	118		131 =	
	14. Sel. 186 = +	{ 236 }	450		Wed., May 11	
1950+4		{ 30 }	-365 d. in 127 B. C.			
13973		{ 118 }				
+ 65			85		85	
7)14038		13973 =	85		+65	
			+354 d. in Sel. 187	AG		
2005+3			439		150 =	
14327	15. Sel. 187 =	354	-366 d. in 126 B. C.		Tues., May 29	
65			73 d. in 125 B. C.		73	
7)14392				F	+65	
					138 =	
2056+0		14327 =			Sat., May 18	

Now, whether we add four lunar years ($4 \times 354 = 1416$) plus two intercalary months of thirty days each (sixty days) to complete this nineteen-year cycle, viz. $14327 + 1416 + 30 = 15803$, or deduct the residue of the era from the grand total, i.e. subtract the

6940 d. of the Cal. P. III⁴
 27760 d. of the Cal. IV¹⁻⁴
 27759 d. of the Cal. V¹⁻⁴
 6940 d. of Cal. P. VI¹
 128 d. of Cal. P. VI²

69527 d. from 85330 d.,

the aggregate at the end of the third nineteen-year cycle of the Third Calippic Period is 15803 days, neither more nor less, and the significance of this conclusion is, that, since not a single day can be added or subtracted from this amount, unless some other method of disposing and distributing the 6940 of this nineteen-year cycle can be found, there is no way of verifying and vindicating the date of Josephus for the episode of the Parthian cam-

paign. For consider: According to this arrangement there is not a single case of Pentecost falling in close consequence to a Sabbath or Saturn's day, as required by his narrative. Not only does the feast of Pentecost fail to fall on a Sunday or first day of the week in the year recognized as most probably the year of its occurrence, but the failure to fall into the proper place extends to every one of the ten years of this decade. Thrice, in 135, 128, and 125 B. C., does it coincide with the Sabbath itself, twice (in 134 and 131 B. C.) it falls on the Friday before; twice on a Tuesday; once, and that in the year favored with probability, in 129 B. C., on a Tuesday. How can this application of the Calippic system to this cycle be right? There must be, and is, another way of settling this question. It is possible that, in the newly regained freedom from foreign interference, the Jewish priests and prophets, or whosoever business it was to regulate the calendar, relapsed into the primitive, original method of doing so. This reactionary and retrogressive procedure not unlike the relapses into "the old-time religion" frequently hailed as new revelations of the spirit, was, at best, only temporary, lasting through one or two nineteen-year cycles, when it was again discarded in favor of the more scientific and all around more satisfactory Calippic method. But let us try the experiment and find out how the problem will look when executed in the old-fashioned way, i.e., intercalating every third year, in the third, sixth, ninth, twelfth, fifteenth, eighteenth, and nineteenth year.

The 178th year of the Seleucidæ being the sixth year of the third nineteen-year Metonic cycle of the Third Calippic Period, we begin with a year subject to equation:

		<i>Old Jewish — Julian.</i>			
10666		10666	65		65
+ 65					+65
7)10731	6. Sel. 178 = +	$\left\{ \begin{array}{c} 177 \\ 30 \\ 177 \end{array} \right\}$	$\left\{ \begin{array}{c} 177 \\ 30 \\ 177 \end{array} \right\}$	d. in Sel. 178. E	130 =
1533+0					Sat., May 10
11050			449		
+ 65			-365 d. in 135 B. C.		
7)11115	7. Sel. 179 = +	11050	84		84
1589+6		354	+354 d. in Sel. 179 DC		+65
			438		149 =
11404			-366 d. in 134 B. C.		Fri., May 28
+ 65					
7)11469	8. Sel. 180 = +	11404	72		72
		354	+354 d. in Sel. 180 B		+65
1638+3			426		137 =
			-365 d. in 133 B. C.		Tues., May 17

Old Jewish—Julian.

11758 + 65 7)11823 1689+0	9. Sel. 181 = +	11758 .. $\left\{ \begin{array}{c} 177 \\ 30 \\ 177 \end{array} \right\}$	61 177 30 177	d. in Sel. 181 A	61 +65 126 = Sat., May 6
12142 + 65 7)12207 1743+6	10. Sel. 182 = +	12142 .. 354	80 +354	d. in Sel. 182 G	80 +65 145 = Fri., May 25
12496 + $\left\{ \begin{array}{c} 30 \\ 1 \\ 29 \\ 6 \end{array} \right\}$ 7)12562 1794+4	11. Sel. 183 = +	12496 .. $\left\{ \begin{array}{c} 30 \\ 1 \\ 324 \end{array} \right\}$	69 1 354	d. in Sel. 183 FE	69 1 65 135 = Wed., May 14
12851 + 65 7)12916 1845+1	12. Sel. 184 +	12851 .. $\left\{ \begin{array}{c} 177 \\ 30 \\ 177 \end{array} \right\}$	58 + $\left\{ \begin{array}{c} 177 \\ 30 \\ 177 \end{array} \right\}$	d. in Sel. 184 D	58 +65 123 = Sun., May 3
13235 + 65 7)13300 1900+0	13. Sel. 185 = +	13235 .. 354	77 +354	d. in Sel. 185 C	77 +65 142 = Sat., May 22
13589 + 65 7)13654 1950+4	14. Sel. 186 +	13589 .. 354	66 +354	d. in Sel. 186 B	66 +65 131 = Wed., May 11
13943 + 65 7)14008 2001+1	15. Sel. 187 =	13943 .. $\left\{ \begin{array}{c} 177 \\ 30 \\ 177 \end{array} \right\}$	420 -365 55 + $\left\{ \begin{array}{c} 177 \\ 30 \\ 177 \end{array} \right\}$	d. in Sel. 187 AG	55 +65 120 = Sun., Apr. 29
	16. Sel. 188 = +	14327 .. 14327 .. 354	439 -366 73 73 +354	d. in Sel. 187 F	73 +65 138 = Sat., May 18
			427 -365	d. in Sel. 187 F	

or Thursday, a Friday or even a Saturday, is the element which constitutes its chronological value, and merits for it the high rate of praise and appreciation bestowed on it by eminent chronologers. It is, therefore, with especial pleasure and gratification that we note the result of this little experimentation, to wit, that J. P. 4585 or 129 B. C. is the only year within reasonable limits that comes up to historical requirements one hundred per cent. In J. P. 4586 or 128 B. C., when Dr. Seyffarth maintains that the two-days respite from military duty occurred, the Sabbath and Pentecost are merged into one and therefore cannot be made to do duty for two. In 130 B. C. or J. P. 4584, when common chronology declares the Jewish auxiliaries rested on two successive holidays, the Pentecostal anniversary fell flat (as Shakespeare would say) "in the dead waist and middle" of the week, on a Wednesday! The only case in which a juxtaposition of Pentecost and Sabbath could possibly necessitate an armistice in the Parthian campaign of John Hyrcanus, was in the Julian year J. P. 4583 or 131 B. C., but then only at the expense of historical truth and contingency: the holidays would be reversed, in opposite order! In J. P. 4585 or 129 B. C., however, at the expiration of the 1845th week of the Asmonean-Herodian Era, we have the feast of Pentecost following on the next day, Sunday after the Sabbath, on the third day of May, 129 B. C. On this day, not only the date of the Parthian incident is revealed, but the instrumentality is laid bare through which this date is partly made possible: the locality of another extra-intercalary day has been discovered. Somewhere before the fourth thirty-day intercalation in the eleventh year of the cycle there was, and had to be, an extra insertion of a single day. As we found it necessary to inject an extra "bissextile" day in Nisan or Xanthicus of Sel. 382 or 70 A. D., so we are bound to take an extra intercalary day for granted, most plausibly in the eleventh year of the cycle. Without attempting to determine, at the present time, the exact site of this second extra intercalary day, let us remember that, wherever it may be, it does not go to disturb the location of this nineteen year cycle. It comes to an end on the 15803rd day of the Era, which was the twenty-ninth of March, 122 B. C.

VOLUME III. CHAPTER V

CAPTURE OF JERUSALEM BY POMPEY

The next available test-case vouchsafed us by the kind disposition of Providence for the correction or reconstruction of the ancient Jewish calendar is the date assigned to the capture of Jerusalem by Pompey the Great. This date, a time-determination worthy of the cause to which it is dedicated, is arrived at by a combination of the statements of Dio Cassius, the Roman, and Flavius Josephus, the Jewish historian. Neither one alone is specific enough to determine to what particular part of the calendar his recorded date belongs, but combined, the specifications could not be more complete and perfect.

In the words, then, of Dion Cassius (*H. R.* XXXVII. 16), Jerusalem was taken “ἐν τῇ τοῦ χοῦνου ἡμέρᾳ” (on Saturn’s day); in those of Josephus, “*on the third month, on the day of the fast, upon the hundred and seventy-ninth Olympiad, when Caius Antonius and Marcus Tullius Cicero were consuls.*” (*Antiq.* B. XIV. C. IV. §3) Accordingly, each historian distinguished the day of capture by a chronological notation which seemed to him a sufficient memorial of the event. To the Romans, who, “on those days which we call Sabbaths, threw nothing at the Jews, nor came to any pitched battle with them, but raised up their earthen banks, and brought their engines into such forwardness, that they might do execution the next days” (*Antiq.* B. XIV. C. N. §3), it was a matter of sufficient information to be told that the Romans had succeeded in their endeavors, because “Pompey had taken notice of the *seventh* days, on which the Jews abstain from all sorts of work on a religious account.” (*Wars*, B. I, C. VII. §3) But to the Jews, with whom the observance of all *seventh* days was a matter of ancient custom, it needed an additional mark of distinction to specify which of the many Sabbaths of the year was the final day of disaster: hence the painful reminder that it was “*on the day of the fast, on the third month, . . . upon the hundred and seventy-ninth Olympiad,*” etcetera. What may be considered the only permissible meaning of the Jewish author when qualifying his date “*on the day of the fast,*” must be subjected to a thorough discussion later on.

Before we can busy ourselves with the minor details and particulars of this very important date, we shall be obliged to settle the major points of the Olympiad and consular designa-

tion of the year in which this disaster to Jerusalem happened. To us it appears a foregone conclusion that, by "the 179th Olympiad," Josephus meant the stadium or first year of this Olympiad, i.e. the twelvemonth extending from midsummer 64 to midsummer 63 B. C., and, by the consulship of Cicero and Antony, he meant the unreformed Roman year then in vogue from the early fall of 64 B. C. to the early autumn of 63 B. C. But both facts do not so appear to all chronologists. While, as a matter of fact, Josephus meant to identify the third year of the 179th Olympiad with the consulship of Cicero and Antony, Dr. Jarvis, Mr. Page, Prof. Totten, and all of their followers, who place all Olympiadic years and the Roman consular terms from Cicero and Antony down to Pius Antoninus a whole year higher up, insist that it is the second year of the 179th Olympiad that was contemporary with Cicero's consulship. On the other hand, Dr. Seyffarth, Ideler, and others, who place the same consular terms and Olympic years two entire years later, insist that the events usually assigned to J. P. 4651 or 63 B. C. really happened in J. P. 4653 or 61 B. C. Furthermore there is this to be considered that, in spite of the fact that consistency of interpretation would demand that the capture of Jerusalem, for instance, should be placed by the former in 64 B. C., and by the latter in 61 B. C., the advocates of these diverging systems frequently abjure their own conclusions and tacitly accept the common chronology. In a case of chaos like this, how are we to derive order and harmonious arrangement in our premises? It is absolutely imperative that we arrive at exactness and correctness by a laborious but promising examination of the facts.

The capture of Jerusalem, for instance, is so frequently and so fluently assigned to the 4651st year of the Julian Period or to the sixty-third year before the common Christian Era, by the majority of professional chronologists, that it is somewhat difficult to see how any divergence or difference of opinion could possibly arise. But let us indicate one cause. In his *New Light from Old Eclipses* (pp. 73-74), Mr. Page, for instance, who in consistency should place Pompey's capture of Jerusalem in J. P. 4650 or 64 B. C., propounds this argument: "Josephus states [*Antiq.* B. XIV. C. XVI. §4] that Jerusalem was taken by Pompey in the consulate of Cicero and Antony; and he notes it as a singular fatality that the temple was taken on the same day, first by Pompey, and twenty-seven years later by Herod and Sosius... But Jerusalem was taken by Pompey in the consular year 63 B. C.; its capture by Herod, twenty-seven years later, was therefore in 36 B. C."

Now it might be quite as logically argued vice versa that, if Jerusalem was captured by Herod in 36 B. C., (as claimed by

Mr. Page, Prof. Totten, and others), then, of course, the City was taken by Pompey, twenty-seven years before, in 63 B. C. If, again, as claimed by Canon Farrar, Dr. Edersheim, and others, the City was taken by Herod and Sosius in 37 B. C., then just as conclusively, Jerusalem was captured by Pompey in 64 B. C. And if, once again, as maintained by Dr. Jarvis and many eminent chronologists, the City was invested by Herod and Sosius in 38 B. C., then it follows by dint of the same dialectics that Jerusalem was occupied by Pompey in the year 65 B. C., for the interval of time is as truly twenty-seven years in the one case as it is in the other. Unless, then, we avail ourselves of other ways and means of ascertaining the true date of Pompey's capture of Jerusalem, we shall be at a loss to decide when the City fell, and whether or not the calendric conditions imposed by the historians' statements have been complied with in the construction of our calendar. So, where in the scale of time does the consulship of Cicero and Antony really belong?

That this much-mooted administration of the consulate by Cicero and Antony must be ascribed to the year 63 B. C., and not to any other, as a whole, may be briefly demonstrated by several lines of argument: first from the date of the battle of Pharsalia, second, from the date of Herod's capture of Jerusalem; and third, from the date of Augustus Caesar's death.

In the first place, then, the consulate of Cicero and Antony may be shown from the official lists to have been located ($2 + 13 =$) 15 administrations before the death-blow to democracy was delivered in the battle of Pharsalia. This epochal encounter is for a certainty known to have been fought in the summer of the fifth year of Cleopatra's regency in Nab. 700 or 47 B. C., or, in the terms of the consular list, the consulate of C. Julius Caesar II and P. Serv. Vatia Isauricus. But if this year, J. P. 4667 or 47 B. C., was the thirteenth term of consular administration, the first was the consulship of L. Afranius and Q. Caecilius Metellus Celer, leaving only two consular one-year terms, the year 692 A. U. C., with its consuls M. Pupius Piso Calpurnianus and M. Valerius Messala, and its triumphant conqueror, Cn. Pompeius Magnus, and the year 691 A. U. C., with its consuls D. Junius Silanus and L. Licinius Murena, to intervene between them and the consulate of M. Tullius Cicero and C. Antonius, the historical term of Jerusalem's occupation by Pompey. This being so, and no other line of consuls being known to us, it came to pass as a matter of course that the name and title of the consulship of Cicero and Antony became attached to the year variously defined as the 685th of the Nabonnanan Era, the 249th of the Seleucidæ, the 690th from the foundation of Rome (according to the Capitoline Marbles), and the 4651st of the Julian Period or 63 B. C.

So, though this succession of consuls is obviously vitiated by some infection of error not known to us, we submit the argument for what it is worth, and put it down as a verified fact that, according to statistics and historical statements, the consulate of Cicero and Antony concurred in the main with the 4651st year of the Julian Period or 63 B. C.

This remarkably well established date is still further accentuated by the fact that it has served as the starting-point of a chronological era—the Era of Antioch,—and as such may be verified and authenticated by a number of subsidiary coins and documents (see Clinton's *Fasti Hellenici*, Vol. III, p. 366). Thus, for instance;—

In the second place, the capture of Jerusalem by Pompey is said by the Jewish historian (*Antiq.* B. XIV. C. XVI. §4) to have occurred twenty-seven years before possession was taken of it by Herod and Sosius. This second occupation of the City being proffered, as we are aware, in the twilight of an uncertified chronology, as an event variously dated in 38 B. C., 37 B. C., and 36 B. C., it is incumbent on us to accomplish the present demonstration in a round-about way. The argument, however, shall be none the less conclusive because it is circuitous.

Beside the factor already mentioned, the same historian states, in regard to the same happening, that Jerusalem was possessed by Herod and Sosius after 126 years of incumbency on the part of Asmonean priests and princes, and that the year of its termination was a "seventh" or Sabbatic year. Seeing, now, that 126 is a multiple of seven [eighteen times seven], and seeing further that the year Sel. 150 (or B. C. 163–162) was a Sabbatic year or "year of rest" (I Macc. VI. 49.53), it follows that Sel. $150 + 126 = 276$, or B. C. $163 - 126 + 27$, will indicate the year which Josephus intended to specify as the date of the City's capture by Pompey; and that is the year already pointed out, Sel. 249 or 63 B. C.

Again, if we deduct: $126 - 27 = 99$, we obtain from Josephus the virtual affirmation that the Holy City was taken by Pompey in the first twelvemonth of a Jewish week of years. For, if we divide $99 \div 7$, we have 14 plus 1, or $27 \div 7 = 3 + 6$. This being so, the year meant to be defined by Josephus as the consulate of Cicero and Antony when Pompey captured Jerusalem, is that best synchronized with the Seleucic year 249 (civil) or 250 (hieratically reckoned), which, as the sacred year of the Jews, began its course in the spring of 63 B. C. and ended in the spring of 62 B. C. It likewise squared almost perfectly with the 690th year of the Capitoline computation A. U. C.

Finally, the identification of J. P. 4651 or 63 B. C. as the consulate of Cicero and Antony, and therefore the evident date

of Jerusalem's capture by Pompey may be derived from the double-barrelled biography of Caesar Augustus, whose sublimated birth has been likewise ascribed to the consulate of Cicero and Antony. If nothing else were calculated to conjure up doubts as to the truth of history, or "fiction agreed upon," in this case, the duplicity of the horoscopes as to the age of Augustus should certainly tend to do so. Nevertheless even this diversity of calculation may serve to confine estimates as to his age within certain limits. Regarding the contradictory birth-dates as the positive and negative poles of the potential Ciceronian consulate, the interval between the two will be the Roman unreformed year in which the occupation of Jerusalem by Pompey the Great certainly fell. Now Josephus, the Jewish historian, affirms (*Antiq. B. XVIII. C. II. §2*) that "the duration of his life [i.e. Augustus Caesar's] was seventy-seven years," while Suetonius, the Roman biographer, asserts (*Caesar Augustus* Chap. C) that "he was seventy-six years of age, wanting only thirty-five days." Both must be computed from the latter end, for that only is the immovable point of departure in this case. Having expired, as Suetonius says, when the two Sextus's, Pompeius and Apuleius, were consuls, upon the fourteenth of the calends of September, which, according to the vulgar reckoning of the Egyptian (or Coptic) Calendar, was the last day of the Nabonassan year 761, this fully-rounded-out year was, of course, accorded to Augustus Caesar as the forty-third of his reign on the *Astronomical Canon*. Counting backwards from this day and year, which, in the terms of the Julian calendar, was the nineteenth of August, J. P. 4727 or 14 A. D., we obtain the two-headed beginning of Augustus Caesar's life. The first, accrediting the second emperor of Rome with seventy-seven years (Josephus' estimate), will place his birth in the closing days of Nab. 684, or the autumn of 64 B. C. or J. P. 4650, as calculated by Theogenes, and as claimed in our day by Dr. Jarvis, Mr. Page, Prof. Totten, and others. The second, allowing less than seventy-six years for his age, locates his nativity at the close of Nab. 685, or the fall of 63 B. C. or J. P. 4651, as computed by Scaliger, Petavius, Kepler, De La Nanze, Ideler, Dr. Seyffarth, and the majority of chronologists. Both may be taken as a double demarkation of the same consulate, and both may thus contribute with combined force to the same testimony that, so far as the location of consular terms is concerned, the year 685 of Nabonassar or 249 of the Seleucidae [our own 63 B. C. or J. P. 4651] is meant as the consulship of M. Tullius Cicero and C. Antonius, and the year of the date when Jerusalem was taken by Pompey the Great.

In view of the fact that, at this point, the advocates of an earlier-occurrence chronology take recourse to astronomy as

well as to history in order to locate at least some of the great events of Cicero's consulship a year higher up, it would look remiss in duty or in diligence to pass by this apparently convincing argument without notice. The gist of this would-be decisive argument is this; that Cicero, relating the main events and major incidents of his consulship in his Greek-composed memoranda called *Hypomnema*, declares, as Mr. Page puts it (*New Light*, p. 58), that there was "an eclipse of the moon, about the time of the *feriae Latinae*, and when Mons Albanus was covered with snow (*nivalis*). This eclipse is supposed to have been the partial one of November 7, 64 B. C. There was another eclipse, twelfth of May, 63 B. C. [third of May, 63 B. C. or fourteenth of May, 64 B. C.?], but at that time of the year the Mons Albanus would not have been *nivalis*."—"We introduce this testimony," continues Mr. Page, "to show that the earlier chronologists generally have agreed in placing the nominal beginning of the [consular] year 63 B. C. in the autumn of 64 B. C.; and the mention of the eclipse, which the description shows was that of November seventh, B. C. 64, and which occurred in the earlier part of Cicero and Antony's consulship, proves that they are justified in doing so."

According to the calendar compiled by learned antiquaries from remaining fragments of early almanacs and from the trenchant testimonies of Livy, Ovid, Pliny, and others, (as published in Blondel's *History of the Roman Calendar* and reprinted in Jarvis' *Chronological Introduction to the History of the Church*, p. 88), the "*feriae Latinae*" on Mons Sacer were wont to be celebrated on the V. Kal. Maias or the twenty-seventh day of April. That it was a spring festival, and not a summer, fall, or winter holiday, is evident from the fact that it was observed by the consuls on the eve of their departure for their provinces or upon their entrance on some military campaign. So, for instance, speaking of the consulship of Quintus Fulvius Flaccus and Lucius Manlius Acidinus in 179 B. C., Livy narrates: "The *winter* of that year was rendered remarkably severe by *great falls* of snow, and storms of every kind: so that the *Latine festival* on the mount was broken off soon after its commencement, by a hurricane coming on suddenly, and with irresistible fury; but it was celebrated afterwards," etcetera. Again, going back to more ancient times when the calendar of Rome was still in harmony with the seasons, we read that "Flaminius, one of the consuls elect [for A. U. C. 536 or 217 B. C.], to whom had fallen by lot the legions which *wintered* at Placentia, sent an edict and letter to the [then commanding] consul [Sempronius], desiring that those troops should be ready in camp at Ariminum *on the ides of March*, [as it was] his design to enter on the office of consul in his prov-

ince," and that, "having failed to proclaim *the Latine festival*, and to perform on the Alban mount the customary sacrifices to Jupiter Latiaris, he pretended a journey, and, while yet in a private capacity, went secretly into the province" (Livy, *H. R.*, B. XXI. C. LXIII.). Again: "*At the first approach of spring*, Hannibal quitted his *winter-station*,...leaving his *winter-quarters* earlier than usual. In the meantime at Rome, Cneius Servilius [his colleague] entered on the office of consul *on the ides of March*," and, "*the Latine festival being celebrated*, the sacrifices on the Alban mount were performed, and vows duly offered in the capitol" (*H. R.*, B. XXII. C. 1). A few years later, when "Quintus Fulvius Flaccus, a third time, and Appius Claudius, entered upon the administration of the consulship," we are told (Livy, *H. R.*, B. XXV. C. XII), "*the Latine festival* detained the consuls and praetors *until the fifth of the kalends of May*: on that day, having completed the solemnities on the mount, they set out for their respective provinces." But, less than a quarter of a century later, the date of the Latine festival had already fallen back to such an extent that a second celebration of the feast was necessary to restore the day of mobilization to its appropriate season. In the consulship of Lucius Cornelius Scipio and Caius Laelius, in A. U. C. 563 or 190 B. C., when the *feriae Latinae* are again mentioned, the regular celebration of this festival had retrograded so excessively that the ides of July superseded the ides of March. On the occasion of his gathering his army together for his campaign in Asia, "the consul Lucius Cornelius Scipio gave public notice that the soldiers should all meet him at Brundisium *on the ides of July*. . . Just at the time when the consul went to join the army during the celebration of the Apollinarian games, *on the fifth of the ides of July* (Quintilos), though the sky was serene, the light was obscured in the middle of the day by the moon passing over the orb of the sun." (B. XXXVII. C. IV). The V. Id. Quint. or the eleventh day of the July of Numa's calendar had coincided with the fourteenth of March, 190 B. C., of the Julianized Roman calendar. The calendar of Numa, by lapses of the intercalary months, had fallen back so frightfully that the dislocation of the festivals amounted to 119 days! It is clear, then, that when we revert to the eclipse of the moon in the consulship of Cicero and Antony, we may look either for an early coincidence of the *feriae Latinae* with an eclipse some four to six months ahead of the calendric date on April twenty-seventh, or else for a close concurrence of the *Latine festival* with the season of the year when it is supposed to be observed. Accordingly, we are apt to meet with an abnormally previous celebration of the feast, coeval with the earlier obscuration of the moon on November seventh, 64 B. C., or we

may be confronted with a normal coincidence of the festival with its regular, original date in the calendar on April the twenty-seventh, 63 B. C.

When we consider that a full century is a long, long time for a calendar to fluctuate and vacillate in ever increasing confusion, and yet never to have wavered enough to have finished an entire revolution of the year [as did actually happen in the case of the Coptic or old Egyptian calendar], and recall the additional fact that, in J. P. 4668 or 46 B. C., in the decisive reformation of the Roman calendar by Julius Caesar, an intercalation of ninety, and only ninety days, was effected to reduce the first of January to the starting-point of the year, we are committed to the task of determining which of two ways of adapting the then-prevalent Roman calendar to the requirements of the case did actually obtain application at that time.

There are two alternatives to be considered: either the time between the pristine date of the Latine festival on April twenty-seventh and the autumnal obscuration of the moon on November seventh, 64 B. C., must be increased to at least 172 days, so as to include the antecedent shifting of Cicero's *feriae Latinae*, or the time between these points must be reduced to nothing or to seven or eight days beyond April twenty-seventh, so as to include the later date of a lunar eclipse on May third to fourth, 63 B. C. In the one case, it is necessary to suppose that, a hundred years before or so, the defection of the calendar had not yet reached its climax, but continued to climb higher and higher, until it mounted to upwards of 172 days. In the other, it is needful to suppose that the irregularity of the calendar, after 190 B. C., began to decline, and, by dint of excessive intercalation, (brought about through fear or favor), continued to decrease, until, in 63 B. C., the high tide of excess carried the *feriae Latinae* over and beyond its traditional date (April twenty-seventh), so as to cover the day and night of the lunar eclipse on May third to fourth, in the same year J. P. 4651 or 63 B. C. Without taking into account the not insignificant characteristics of the two obscurations, the former in 64 B. C. being partial and therefore unimportant, the latter in 63 B. C. impressively total and therefore remarkable, it appears far more probable that the extreme overplus of 119 days in 190 B. C. should be reduced to nothing by over-intercalation in the space of 127 years, and then increased again within the following seventeen years [from 63 to 46 B. C.] by neglect or omission to ninety days [the sum total of Caesar's intercalations], than that the tremendous surplus of 119 days in 190 B. C. should have swelled to the still more staggering sum of 172 days in 64-63 B. C., which fairly extravagant quantity is required to tide the *feriae Latinae* over the gulf

to a standstill under the eclipse of November seventh, 64 B. C., and then suddenly to have ebbed within less than a quarter of a century to a minimum of ninety days in 46 B. C. But if, according to the former case, the partial lunar eclipse of November seventh, 64 B. C., coincided with the *feriae Latinae* of Cicero's consulship (on April twenty-seventh of Caesar's calendar), this, being the $(31+28+31+27=)$ 117th day of the year, throws the first of January of Cicero's consular term back into the beginning of July, making the Roman consulship almost contemporaneous and contemporary with the archonship of Athens and the years of the Greek Olympiads. Yet, extremely early as this would make the consulship of Cicero and Antony, this prematurity of the term would not be previous enough to satisfy the claims of Dr. Jarvis, Page, Totten, and others, that all consulships prior to 160 A. D. be forced a full year upward, if, in consistency, they had lived up to their proposition. Instead of relocating it so that it begins in the fall of 65 B. C. and extend through the earlier three-quarters of 64 B. C., they all forget about their contention and tacitly endorse the traditional location of common chronology. Be that, however, as it may, the choice of eclipse in this case by the protagonists of the anachronistic school is by no means vindicated, and that for the reason that their interpretation of Cicero's word "that the mons Albanus was *nivalis*" is not proven to be correct in the sense that the mountain was at that time "snow-covered."

When it is considered as a fact not to be disputed that the holy mountain was named and famed as the "*white* mountain" (Albanus signifying and meaning "white"), and that, at all times, it glistened and gleamed in the sun like silver, especially at a distance and at a certain angle, it is obvious that the poetical orator would avail himself of the most elegant and sonorous phrases in the Latin language to visualize the beauty of the scene on that memorable festive night. In itself an extraordinarily beautiful sight, it was still more entrancingly enhanced by the light of the silvery moon. So, while it was a regular, everyday feature of Mount Albanus to be "white," ay, "silvery-white," or "snow-white," as the orator chooses to call it, it served the present inspiration of the orator to appraise and laud the whiteness of the mountain by declaring it "snowy." This poetical use of the phrase, however, does not asseverate or guarantee the contention that the mountain was then and there "snow-covered." There was, of course, such a possibility on the seventh of November, 64 B. C., but, if we may go by the ancient Roman almanac as a guide, the twenty-fourth of November was noted as the first day or ordinary beginning of the season [Bruma] for frost, snow, and ice. It is, therefore, not by any

means proven that there was a real blanket of snow to be seen on the peak of the white mountain on the night of the eclipsed *feriae Latinae*. November seventh, 64 B. C.

On the other hand, if we adopt the other alternative that, in consequence of a series of extra, supernumerary intercalations, made by facile priests to curry with the Cinnas and Mariuses and Sullas and Carbos, and other high-handed dictators and imperators of Rome, the civil calendar year was reduced by 63 B. C. to an allignment parallel with the natural solar year or even beyond, we shall find much probability and proof in the times themselves in favor of such adoption. The trend of the times preceding, and the tendency of the times succeeding this date, are in themselves evidential enough to show which way the calendar went—forward or back. Looking at these different periods of Roman history retrogressively, we know for a certainty that, when, in the great year of confusion, J. P. 4668 or 46 B. C., Julius Caesar undertook, with the aid of his secretary M. Flavius and his Greek-Egyptian assistant Sosigenes, to rearrange and adjust the Roman calendar to the current solar year, he did not reduce the civil year by *shortening* its duration, or by *subtracting* an embolismic month from its former length, but rather enlarged its bulk to an aggregate of 445 days by the *addition* of three extra intercalary months, viz. by an *increase* of ninety complementary, intercalary days. It follows from these matters of fact, that the period preceding this date, from 63 to 46 B. C., must have represented a part, if not all, of the time during which, according to Macrobius, "from superstitious motives, all intercalation was omitted," making recourse to intercalation on the part of Caesar imperatively necessary. The other extreme of manipulations in the calendar evidently prevailed in the preceding period, extending back from 63 to 190 B. C. For if (if ever) the Roman calendar was destined to be restored to its pristine relation to the solar year, it was bound to be done by dint of repeated over-intercalations either in compliance with law or else in defiance of law. How else, except by replacement, could the 117 or 119 days' default in 190 B. C. be met and commensurately accounted for? So it is not conceiving too illiberal or too radical a view of this century and a quarter from 190 to 63 B. C. if we believe the men of this age capable of bending the calendar with its religious customs and ceremonies to their own private, if not pernicious, uses. This is not a mere fancy, but a fact well-attested by ancient authorities. Thus, for instance, Plutarch, speaking of the erroneous computations by which the Roman year had been disordered, ascribes the fault to the arbitrary intercalations of the priests, and praises the regulations made by Caesar. "Even Numa," says Dr. Jarvis, "had

made it the duty of the pontiffs to effect and to declare the intercalation; but they were often led by political favoritism to lengthen the year of a friend, or diminish that of an enemy." On the strength of such testimony we may safely conclude that the requisite six supernumerary insertions of Merkedonii were actually performed or, if you will, perpetrated. Be the mode or manner of accomplishment reprehensible or not, at the rate of one illegal interpolation in each score of years, the goal would have been reached in 63 B. C. In that year, supposing the Latine festival on the twenty-seventh of April to have coincided with the third of May of the Julian calendar, the current calendar would have come near to running neck and neck with the natural solar year, exceeding it only by six or eight days, according to the mode of reckoning with Numa's or with Caesar's calendar. The *feriae Latinae* mentioned by Cicero would fall a week or so later than its ancient, original date (April twenty-seventh) demanded, but it would have been signally determined by the remarkable attractive and correspondingly celebrated eclipse of May third, 63 B. C.

Having thus shown the probability of this assumption, let us see whether there is any positive proof for it in the statements of ancient historical and chronological writers. Fynes Clinton, referring to Cicero's mention (*Catil.* II. 10) of *winter: his jam noctibus*—that is, *winter nights: Quo pacto illi Apenninum atque illas pruinas ac nives perferent?*" etcetera remarks: "This language describes November rather than September, and is an argument that the Roman calendar in that year was not far from the true time." But we need not take any man's word for it: we may compute the time to a day.

On the assumption that the *feriae Latinae* of Cicero's consulship coincided with the date of the lunar eclipse on the third of May, 63 B. C., there intervened between this date and the last day of December, 46 B. C., when the antiquated calendar of Numa was forever displaced by the Caesarean, 6452 days; for $17 \times 365 = 6205 + 4 \text{ l. y. ds.} + 243 \text{ days (in 63 B. C.)} = 6452$. There are exactly as many days in two Roman octaeterides + the 237 days remaining in Numa's calendar in 63 B. C., *not* including one intercalary month of twenty-three days then due, which one of the pontiffs of this period failed to inject. From May third,

63

63 B. C., to December thirty-first, 46 B. C. — 46

$ \begin{array}{r} 355 \times 17 \\ \hline 2485 \\ 355 \\ \hline 6035 \\ + 237 \text{ ds. in 63 B. C.} = 237 \\ \hline 88 \text{ ds. } (22 \frac{1}{2} \times 4) \{ \\ 92 \text{ ds. } (23 \frac{1}{2} \times 4) \{ = 180 \text{ d.} \\ \hline 6452 \text{ ds.} \end{array} $	$ \begin{array}{r} 29 \\ 28 \\ 31 \\ 30 \\ \hline -118 = 118 \\ \hline 6452 \\ - 90 = \\ \hline 6362 \end{array} $	$ \begin{array}{r} 365 \times 17 \\ \hline 2555 \\ 365 \\ \hline 6205 \\ + 4 \text{ l. y. ds.} \\ \hline 6209 \\ + 243 \text{ ds. in 63 B. C.} = 243 \\ \hline 6452 \\ - 67 = 67 \text{ ds.} \\ \hline 6385 \\ - 6272 \\ \hline 113 \\ - 44 = (22 \times 2) \\ \hline 69 \\ - 46 = (23 \times 2) \} = 90 \text{ ds.} \\ \hline 23 \text{ ds.} \end{array} $
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$$\begin{array}{r}
 31 \\
 28 \\
 31 \\
 30 \\
 2 \\
 \hline
 365 \\
 - 122 = 122 \\
 \hline
 243
 \end{array}$$

Since there can be no more and no less than 6452 days in this period of confusion, there is but a limited possibility of an arbitrary disposition of them. Deducting, in the first place, the number of days contained in the main body of Numa's calendar, i.e. 17×355 days = 6035 + 237 days in the latter part of Cicero's consulship, there remain only [6452 - 6272 =] 180 days to be distributed among the sixteen years of the two full octaeterides embraced in this period, to equalize the two calendars. There being, as stated, two full actaeterides in this period, during which a minor month of twenty-two days and a major month of twenty-three days alternated with each other every second year, there must have been at least eight intercalary months between 63 and 46 B. C. (inclusive). Now we know from Suetonius and Censorinus that the last year of Numa, the great year of confusion, and the last year of an eight-year cycle of Numa's calendar, was entitled to, and received, a major complementation of twenty-three days. The statement of Censorinus is, "that when Caius Caesar was Pontifex Maximus, in the year of his third consulship with Marcus Aemilius Lepidus, he interposed, in order to correct the error, *two intercalary months of [33 + 34 =] 67 days between November and December, when he had already intercalated twenty-three days in the month of February.*" And to remove the

thought of this transaction being extraordinary or arbitrary, Suetonius reports: "He interposed two other months between November and December, so that the year in which these arrangements were made, consisted of fifteen months, including *the intercalary month*, which, *according to custom*, had taken place that year" (Suet. *Jul. Caes.* § xl). This concluding point being fixed, the whole series of eight intercalations in the two octaeterides is settled. Special mention, however, is made of the first intercalation of the second octaeteride in this period, in the second year of the cycle, but the second month of the Julian year J. P. 4662 or 52 B. C. Referring to the year when Pompey the Great was created sole consul, Ascanius (*Arg. in Cic. Milon*, p. 778) remarks: "*Pompeius ab interrege Ser. Sulpicio V. Kal. Mart. mense intercalario consul creatus est, statimque consulatum iniit.*" Pompey was created consul by the interrex Ser. Sulpicius on the V. Kal. Mart. [=February twenty-fifth] *during the intercalary month*, and entered immediately upon his consulship." The first and last term of intercalation being thus specifically mentioned as recognized and complied with, it is plain that this second eight-year cycle, running from 54 to 47 B. C., is absolutely precluded from the suspicion of having been slighted or disregarded by design or neglect. The time, therefore, of which Macrobius wrote that "from superstitious motives, all intercalation was omitted," must have occurred in the preceding eight-year cycle, when the first triumvirate, or three-man conspiracy, obtained. During this space of time, left "unfulfilled" by the supreme pontiff, and for fear of prolonging an unrepugnant and unpopular institution, the foundation was laid for the calculation of sixty-seven days (the sum total of 22+23+22 intercalary days), to be recompensed to the Roman calendar in 46 B. C. As the sixty-seven days composing the two long intercalary months of thirty-three and thirty-four days between November and December were equivalent to *two* minor Merkedonii and *one* major Merkedonius, it is clear that the only *two* available minor intercalations, together with the *one* intervening major month, are identical with the three intercalary months thus rendered conspicuous by their absence. And there appears to be no choice or predilection in the matter, as a glance at the subjoined prospectus of this period will show.

B. C.	A. U. C.	Cycle.	Intercalary Months.	
63	690	VIII.	Merkedonius major	23 ds.
62	691	I. 1.		
61	692	II. 2.	Merkedonius minor	— [22]
60	693	III. 3.		
59	694	IV. 4.	Merkedonius major	— [23]
58	695	V. 5.		

<i>B. C.</i>	<i>A. U. C.</i>	<i>Cycle.</i>	<i>Intercalary Months.</i>	
57	696	VI. 6.	Merkedonius minor	— [22]
56	697	VII. 7.		
55	698	VIII. 8.	Merkedonius major	23 ds.
54	699	I. 9.		
53	700	II. 10.	Merkedonius minor	22 ds.
52	701	III. 11.		
51	702	IV. 12.	Merkedonius major	23 ds.
50	703	V. 13.		
49	704	VI. 14.	Merkedonius minor	22 ds.
48	705	VII. 15.		
47	706	VIII. 16.	Merkedonius major	23 ds.
46	707	— —		

Long and, perhaps, tedious as this digression may appear, there still remains the necessary deduction to be drawn from the whole argument. The necessary conclusion to be driven home to the hilt is this, that the contention advanced so ostentatiously by certain would-be scientific chronologists, to wit, that Augustus Caesar was born in Cicero's consulship and yet in 64 B. C., cannot be true. Even for an emperor, idolized and deified like Augustus, it goes without saying that he cannot have TWO true-blue birthdays at the same time, one in one year and the other in another. Josephus, the Jewish historian, and Suetonius, the Roman biographer, cannot both be right. If Caesar Augustus was less than seventy-six years old when he died, he cannot, too, have been seventy-seven. If, according to his majesty's own reckoning, he was sixty-three years old when, on the twenty-fourth of September, A. D. 1, he wrote that famous letter to his grandson in the year of his consulate, A. D. 1, in which he declares that he had escaped the common climacteric of all old men, his sixty-third year, and hoped he had joyfully and in good health celebrated his sixty-fourth birthday, it follows by the inexorable logic of numbers that he himself placed his nativity in 63 B. C., and not, by any chance or possibility in 64 B. C. If, then, the emperor Caesar Augustus was born as late in the year as the twenty-third of September in 63 B. C., and yet was born, according to all authorities, including himself, in the consulship of Cicero and Antony, then the consulship of Cicero and Antony included the latter half of J. P. 4651 or 63 B. C., and did not overlap into the preceding year J. P. 4650 or 64 B. C.

Thus we have shown that this great event, too, like the other three great occurrences, did actually happen in the great Roman orator's consular term, which was to all intents and purposes coextensive and coincident with J. P. 4651 or 63 B. C. It was in the early beginning of spring, 63 B. C., that old king Mithridates committed suicide or was slain by his son Pharnaces. It was at the transition from spring into summer, in 63 B. C., that the mountain fastness Jerusalem fell before the strategic genius

of Pompey, the greatest Roman general up to date. It was at the meeting of summer and autumn, in 63 B. C., that Caesar Augustus, the greatest of the Roman emperors, was born to be the greatest ruler of the then-known world. And it was at the change of fall into winter, that the discovery was made by Cicero of Cataline's conspiracy, which terminated with Catiline's death before the same winter was over in the succeeding consulship of Silanus and Murena. Two of these events, the first two, may clearly be placed or suffered to keep their place as fixed in the first half of the Julian year 63 B. C., being defined as having occurred in the consulship of Cicero and Antony. But the other two, the last two in the order of time, cannot be transposed and preferred before the former two. For if, as claimed by Dr. Jarvis, Mr. Page, Prof. Totten, and so forth, the consular term of Cicero and Antony must be pushed up some 101 (or rather some 172!) days into the preceding solar year, so as to make the Latine festival coincident with the eclipse date of November seventh 64 B. C., then the solar year 63 B. C. is to that extent despoiled and bereft of its specific character as the consulship of Cicero and Antony. Then the last two of those famous four events are either outspokenly consigned to the following consulship of Silanus and Murena (a feat, however, which is not attempted by anyone), or they are left so disconnected and detached from their proper place and environment that it is impossible to reconstruct a normal connection with other matters of fact transpiring at the time. The conspiracy of Catiline, in particular, would be attenuated and drawn out from a supposititious beginning in 64 B. C., if regarded as commencing Cicero's consulship, dragged along and stretched throughout its year-long duration, and then only terminated in the succeeding consulship. And the nativity of Caesar Augustus, supposing it to be established in the splendid isolation of late 64 B. C., would then be of a piece with the mobilization of Scipio's army, which is assigned by these supposed chronologists to the date of the solar eclipse on the sixteenth of July, 188 B. C., but then leave it severed from all connection with former associations and relations. As it is, the date of Augustus Caesar's birth, as insisted on by this particular school of chronology, is not so far separated from the fact that it does not bear presumptive evidence in favor of the time intended, nevertheless it is far enough removed from the actual date to forfeit all consideration as positive proof of his age. It is a whole year of 365 days out of line. The aberration could have been aggravated only in the imaginary case that these chronologers had remained loyal to their theory; which is, that Cicero's consulship should have been 64 B. C., or, on the basis of 101 days' error endorsed by them, 65-64 B. C. In that case, even the

anachronistic date suggested by Mr. Page for Augustus Caesar's horoscope (September twenty-third, 64 B. C.) would be exiled and expatriated from the consulship of Cicero and Anthony.

Having thus to a degree of redundancy produced the proof for the historical emplacement of the Ciceronian consulate in 63 B. C., the still more disputed point of the exact day of the City's capture awaits the solution of a most painstaking chronology. It may be admitted at once that the task seems both endless and hopeless, and yet the actual work may be done more expeditiously and more satisfactorily than may be at first expected. We have only to eliminate one proposed date after the other, and the number will soon be reduced to two or three, which may then be subjected to special analysis.

There is hardly a fast-day in the ritual of the Jewish religion which has not been dragged into the limelight as a possible date for the City's surrender to Pompey the Great:

1. the fast in the 3rd month, on Sivan 23d, by Petavius, Dr. Jarvis, et al., on the 65th day of the year.
2. the fast in the 4th month, on Tamuz 9th, by Prideaux, on the 98th day of the year.
3. the fast in the 5th month, on Ab 10th, on the 128th day of the year.
4. the fast in the 7th month, on Tisri 10th, by Canon Farrar, on the 187th day of the year.
5. the fast in the 9th month, on Casleu 28th, by Reimar, Ussher, Clinton, et al., on the 264th day of the year.

But the most casual perusal of the accounts ought to be sufficient to reject the greater number of these conjectures from further consideration.

To begin with, the context alone would indicate that it was not the historian's intention merely to narrate the bare facts of history, but to expatiate and enlarge on the long duration of the Jewish priests' devotion to duty and their disregard of death and danger in their performance of it. He says in effect that, although the siege had lasted so long, "THREE MONTHS," (as he declares in his other book, *Jewish War*, B. I. C. VII. §4 & CIX. §4), they had not grown weary of performing their duties, nor shown any concern for their own safety and welfare, but continued steadfast in the face of destruction, even at the point of the sword. "After a siege therefore of *three months* they were forced to surrender themselves" to the cutthroats of Pompey, when finally disaster overcame them and the City fell "*on the day of the fast.*" When this "*day of the fast*" was, Josephus does not specify, deeming it more important to laud the extraordinary fidelity and devotion of the priests, than to distinguish the exact instant of the City's fall. But it is not impossible to derive from his narrative the date of the fast-day he intended to imply when he wrote this passage.

In the preceding chapter of the same book of his *Antiquities*, Josephus relates how a pious priest by the name of Onias was stoned to death for his refusal to take sides with either one of two fanatical parties then present, and "as this happened at the time when the feast of unleavened bread was celebrated, which we call the Passover" (*Antiq. B. XIV. C. II, §1*), we have here an intimation that the time of action was the middle of Nisan, the first month of the sacred Jewish year Sel. 250 or [the seventh, though still called first] of the civil Seleucic year 249. For contemporaneously with these happenings in Judea, Pompey "in the meantime" sent Scaurus into Syria, to raise the siege of Jerusalem by Aretas and to restore order in general in the country. This Scaurus did, and then returned to Damascus, while Pompey was still on his way thither. But "a little afterward," consequently shortly after the Paschal feast of April fifth, Pompey himself "came to Damascus, and marched over Celesyria; at which time there came ambassadors to him from all Syria, and Egypt, and out of Judea also." (*Antiq. B. XIV. C. III. §1*) How long he remained at Damascus we are not told, but we do know that he lost no time lingering in that city, only to "hear the causes of the Jews, and of their governors Hyrcanus and Aristobulus," postponing his decision until after his arrival at Jerusalem. Then followed a few days, interrupted twice or thrice by efforts of Aristobulus to regain his autonomy. He sallied forth from his favorite stronghold with a view to inciting revolt, but as many times retired without success, until Pompey, now thoroughly angered, conducted his final expedition against him. As it was early "in the beginning of spring," when "he brought his army out of their winter-quarters, and marched into the country of Damascus," it may now, "as he passed by Pella and Scythopolis," have been no later than the end of March or the beginning of April. At any rate, "when Pompey had pitched his camp at Jericho, . . . he marched *in the morning* to Jerusalem." Evidently no dilly-dallying there. It is true, the Romans, with a view to doing execution the next days, "raised up their earthen banks *on those days* which we call Sabbaths," consequently on more than one, or for some time (the historian says "three months"); nevertheless the surrender of the City is not dated by the duration of the siege, but by the serial position of the month in which it was accomplished.

When we consider that Pompey was at Jericho when he heard of Mithridates' death in the early part of spring, it is clear that his capture of Jerusalem within less than three months [Nisan, Iyar, and Sivan] was a transaction of *spring*, not an affair of summer, autumn, or winter. To place it in the *third* Seleucic month Apelleus or the Jewish *ninth* month Casleu (corresponding

to our Julian twelfth month December), is a procrastination as disparaging to Pompey's genius as a military commander as it is derogatory to the reputation of the historian as a master of the literary art. No literary expert would think of locating a fast or feast by the duration of a siege, a sickness, or a spell of bad weather, just as a capable general cannot be thought of as protracting a campaign into winter when he can fight it out during the summer. Besides, seeing that a Decembral taking of the City locates it at the extreme end of the year, in this case, in the last month of J. P. 4651 or 63 B. C., it is plain as a pike-staff that such an emplacement removes the capitulation both from the confines of the consulship of Cicero and Anthony (if it did fall forward by several months) and from the bounds of the first or third year respectively of the 179th Olympiad. Even a capture of the City on the great fast of Atonement on the tenth day of the seventh month Tisri would be beyond and outside of the bounds of the Olympiadic date set by Josephus, though still within the precincts of the Roman consulate. It is evident, then, that none of the fasts in the second half of the sacred year are adapted to the requirements of the case.

Turning, therefore, to the first half of the sacred Jewish year, comprising the fasts in the third, fourth, and fifth months, we find that the fast for Jeroboam's sin, in forbidding the ten tribes to worship at Jerusalem on the twenty-third day of the *third* month Sivan, has been favored by Petavius, William Whiston, Dr. Jarvis, and others, as the day of the capture, while the fast in the *fourth* month, on the ninth day of Tamuz has been preferred by Prideaux (*Connex.* Vol. IV. p. 97). In the latter case, the "third month" mentioned in the date is interpreted as signifying the third month of investment, not the third month of the season or calendar. In the former, the historian is at least given credit for employing his customary mode of expression. Speaking of Herod's capture of the City, Josephus uses the same formula of dating, with the addition that he calls it "the solemnity" of the fast. The fast of the fifth month Ab may be omitted for the same reason as that of the fourth: it is mentioned only because it is, at best a possible, not a probable date. No chronologist of note has (to our knowledge) ever sponsored it.

Now, we may ask, what fast-day or holiday is there left in the third month of the sacred Jewish year to which we could attach the date of Jerusalem's capture? There is none but a feast, the feast of Pentecost, and to this day no chronologists of profession or reputation have ever associated the subjugation of Jerusalem. Why not?

Now, why not take Josephus to mean what he evidently intended to say? On the one hand, it is true that the "*fiftieth*"

day," the principal festival of the third month, is not incorporated in the "Roll of Fasts," as the calendar of days is called on which fasting and mourning was prohibited (See Edersheim, *Life and Times*, Vol. II, p. 698). It is admitted that Pentecost is not so much as mentioned among the fast-days on which it is not lawful to fast, but rather against the law to inflict fasting and self-starvation. Nevertheless a feast may be readily converted into a fast. So, although the Feast of Lights, was instituted and ordained for the express purpose of rejoicing and thanksgiving "with songs, and citherns, and harps, and cymbals," and "ordained that the days of dedication should be kept by the space of eight days with mirth and gladness" (1 Macc. IV. 54-59), like the Roman feast of the Saturnalia celebrated about the same time of the year, yet the feast of Lights, or of Brightness and Illumination, is nevertheless enrolled among the FASTS of the Megillath Taanith. So, too, the feast of Purim, or the feast-days of Esther and Mordecai (see II Macc. XV. 36 and Esther X. 13). Notwithstanding the fact that these holidays are ostentatiously dedicated to joy and jollification almost as boisterous as the Bacchanalia of the Greeks, the Carnival at Venice, or the Mardi Gras of New Orleans, the feast of Purim is for all that enregistered in the Roll of Fasts, the official Ritual of the Jewish Church.

On the other hand, it is a fact that the day of Pentecost was above all designed and ordained to be a day of thanksgiving and a day of great rejoicing. It was to be both a day of the first fruits and a memorial of their people's organization under the law as a nation among nations (see Num. 28: 26.27 and Lev. 23: 16.17). "Also in the day of the first-fruits, when ye bring a new meat offering unto the Lord, after your weeks be out, ye shall have an holy convocation; ye shall do no servile work: but ye shall offer the burnt offering for a sweet savour unto the Lord." But while this is a fact, a notable and adorable fact, it is nevertheless also a fact that a feast may be, voluntarily and involuntarily, turned into a fast, to all intents and purposes treated like a fast, and, in course of time, be formally and virtually termed a "fast." Thus we know, for instance, from the life and experience of St. Paul that the Pentecost feast, to which he hasted, if possible, to be present at Jerusalem, was converted for him into a day of fasting and of mourning (See Acts 21: 26.27.). "Then Paul took the men [who had a vow on them], and the next day purifying himself with them entered into the temple, to signify the accomplishment of the [seven] days of purification, until that an offering should be offered for every one of them." Now, of what did this purification consist? According to Num. 6: 3, "He shall separate himself from wine and strong drink, and shall drink no vinegar of wine, or vinegar of strong drink, neither shall he drink any liquor

of grapes, nor eat moist grapes, or dried." If, then and thus, a day of merry making is changed into a day of mourning, is it doing violence to language, to call such a feast a fast?

In the case confronting us we have an instance of dispensational tragedy which, like the sister-catastrophe of Ab ninth, repeated itself as history will, several times on the same date. Speaking mournfully of this disastrous trend of destiny, when narrating the capture of Jerusalem by Herod and Sosius, Josephus says: "This destruction befell the city... *on the third month, on the solemnity of the fast*, as if a periodical revolution of calamities had returned since that which befell the Jews under Pompey; for the Jews were taken by him [Herod] *on the same day*, and this was after twenty seven years' time." What, then, is to hinder us from applying this description of time to Pentecost, the greatest solemnity of the third month, and the greatest memorial-day of an oft repeated calamity? At any rate we are going to make this application and see what results may be obtained for the various years that can possibly come into consideration.

If we add together the contents of all the nineteen-year cycles between the beginning of the Asmonean-Herodian Era (in 165 B. C.) and the middle year of the debatable ground to which the capture of Jerusalem by Pompey may be, and has been, assigned, we shall have only one year on either side of this middle to reckon with, to ascertain the calendric location and character of each year's offering in the way of a date for the taking of the City by Pompey. Here are the cycles and their contents expressed in days:—

Cal. Per. III. ¹	Sel. 148-153 or 165-160 B. C. = 1923 d.
Cal. Per. III. ²	Sel. 154-172 or 159-141 B. C. = 6940 d.
Cal. Per. III. ³	Sel. 173-191 or 140-122 B. C. = 6940 d.
Cal. Per. III. ⁴	Sel. 192-210 or 121-103 B. C. = 6940 d.
Cal. Per. IV. ¹	Sel. 211-229 or 102- 84 B. C. = 6940 d.
Cal. Per. IV. ²	Sel. 230-248 or 83- 65 B. C. = 6940 d.

36623 days

This sum total of days, 36623, which cannot be augmented or diminished by a single day without violating the fundamental principles of calendar construction, determines the pivotal date up to which the last ephemeris of this period must extend, and beyond which it cannot possibly go without coming into irreconcilable conflict with succeeding cycles. Dividing the sum 36623 by seven, we know that we have passed 5231 weeks and six days, neither more nor less, and, checking up on Julian time, by adding one hundred times 365 days plus twenty-five leap-year days and the nine day's residue of 165 B. C., we have 36,534, which, subtracted from 36,623, leaves eighty-nine days in 64 B. C., or, in

other words, indicates Friday, the thirtieth of March, 64 B. C., to be the ultimate limit to which our calculation goes. In order, however, to take into account the whole period to which the capture of Jerusalem has been, or may be, possibly assigned, we must first recede one year before this date to 65 B. C. and then proceed to 61 B. C., the latest date suggested.

Subtracting the number of days ($236+30+118=384$, or $177+30+177=384$) in the nineteenth year of the preceding cycle, $36623-384=36239$, we have the exact aggregate of days in the ninety-nine years of the Jewish calendar cycle coming under consideration at the present time. Figuring out the same centenary period in the terms of the Julian calendar, we have $(365 \times 100)=36500$, plus the twenty-five bissextiles postulated and the nine days of December left over in 165 B. C., the sum of 36534 days, which, when deducted from 36623, presents itself in the Julian guise as the eighty-ninth day of the year J. P. 4600 or 64 B. C. Reverting again to the previous year as a possible, if not plausible, date for the taking of Jerusalem by Pompey, if we deduct from $[89+365=]$ 454 the number of days [384] in the nineteenth and last year of the preceding cycle, thus: $454-384=70$, we have the number of days in the Julian calendar preceding the New Year's day of the impending Jewish year. In other words, the seventieth day of 65 B. C., being Saturday, the eleventh of March, will be found equivalent to the 36239th day of the Jewish-Roman Era, terminating the 5177th week of the Era, the 247th year of the Seleucidae and the eighteenth year of the Calippic calendar cycle (IV²). This being settled, we are prepared to determine, by easy little problems in arithmetic, what day and what kind of day, in the next three years, Sel. 250, 251 and 252, was the sixth day of Sivan or the feast of Pentecost.

Adding the thirty days of Xanthicus or Nisan, the twenty-nine of Artemisius or Iyar, and the six days of Daesius or Sivan, = sixty-five days, to 36239 on the one hand, and to seventy days on the other, the one will show that the 36394th day of the era was a second day of the week; the other, that it was the 135th day of the year, in fact, Monday, the fifteenth day of May, 65 B. C. This very evidently will not be compatible with the postulations of history.

If we proceed to the following year, and add the number of a lunar year's days [354] to the equated figures of that year—not forgetting the intercalary month to be inserted as Dioscorus or Ve-Elul [i.e. either thus: $236+30+118=384$, or thus: $177+30+177=384$ —we shall have $36239+177+30+177=36623$, and $70+177+30+177=454-365=89$. On the Jewish side of the ledger, we shall have (if we add the same amount as before, but do not forget the extra intercalary day to be inserted in every

first year of a cycle as Xanthicus or Nisan thirty-first), $36623 + 65 + 1 = 36689$ days, and on the Julian side, $89 + 65 + 1 = 144$ ds. By the plain process of addition, we shall know that the sixth of Daesius or Sivan was the 36689^{th} day of the Era, and by division, the second day of the 5242 week. By the same process of addition and subtraction, that the 155^{th} day of the year (Cal. G) was a Monday, the fourth of June, 64 B. C.

Again, if we add the number of days [354] in a lunar year to the aggregate accumulated in the Era up to date, we shall have $36623 + 355 = 36978$, and $89 + 355 = 444 - 365 = 79$ days. [$36978 + 65 =$] 37043 divided by seven will prove that we have reached the 5292^{nd} week of the Era, and the sixth day, Friday, of that week. This alternative of reckoning fails to meet the requirements of history, although we have demonstrated abundantly that this is the year of Jerusalem's capture. Hence we are bound to try another alternative. It is the insertion of an extra intercalary day, four of which are required in every nineteen-year cycle to bring up the lunar cycle to an equality with nineteen solar years. We have already discovered the locality of two of these complementary days, viz. in the first month of the first year and in the first month of the tenth or eleventh year. Now we shall tentatively locate the third extra intercalary day in the first month of the second year of the cycle. If, then, we add *thirty-one* days for Nisan, twenty-nine days for Iyar and six days for Sivan, i.e. sixty-six days, to the number of days in the Era preceding the Seleucid year 250, we obtain $36978 + 1 + 65 = 37044$, and $79 + 1 + 65 = 145$. On this assumption we realize the result that the 37044^{th} day of the Asmonean-Herodian Era, was, as required [$37044 \div 7 = 5292 + 0$], a seventh day or Sabbath, and, equally so, the [$79 + 1 + 65 =$] 145^{th} day of the Julian year J. P. 4651, a Saturn's day, or Sabbath, the twenty-fifth of May, 63 B. C. If it should be found, in the course of subsequent tests along this line of years, say, in the probe of 52 A. D., another important date in the same zone of the cycle, we may say that we have found the original site of the *third* extra intercalary day, leaving only the *fourth* to be sought and found in the balance.

In order to do justice to the claims of the chronological school contending that all the events attributed to 63 B. C. in reality took place in 61 B. C., two years later than generally accepted, we subjoin a symposium of all the little computations designed to show the week-day character of the feasts and fasts of the third month, the feast of Pentecost falling on the sixty-fifth, the fast for Jeroboam's sin on the eighty-second day of the Jewish year. The rest of the fasts in other months of the year are not entitled to revision.

<i>Julian.</i>	<i>D. Era.</i>	<i>Cal. P. and Cycle</i>	<i>Sel. Yrs.</i>	<i>Jewish</i>	<i>Siv. 6</i>	<i>Siv. 23</i>
70	36239			36239 ..	70	A 70
177 {	65			177	+ 65	+ 82
30 { d. in		IVi	19. Sel. 248 = {	30		
177 { Sel. 248	7)36304			177	135 =	152 =
					Mon., May 15	Thur., June 1
454	5186 + 2					
-365 d. in						
65 B.C.	36623			36623 ..		
89	1			1	89	G 89
1 { d. in 249	65	IVi	1. Sel. 249 = {	354	1	1
354 { Sel.					+ 65	- 82
	7)36689				155 =	172 =
444					Mon., June 4	Thur., June 21
-365 d. in	5241 + 2					
64 B.C.						
79	36978			36978 ..	79	79
1 { d. in	1			1	1	F 1
354 { Sel. 250	65	IVi	2. Sel. 250 = {	354	+ 65	+ 82
					145 =	162 =
434	7)37044				Sat., May 25	Tues., June 11
-365 d. in						
63 B.C.	5292 + 0					
69						
177 {	37333			37333 ..		
30 { d. in	65			177	69	ED 69
177 { Sel. 251		IVi	3. Sel. 251 = {	30	+ 65	+ 82
	7)37398			177	134 =	151 =
453					Wed., May 13	Sat., May 30
-366 d. in	5342 + 4					
62 B.C.						
87	37717			37717 ..		
1 d. in	1			1	87	C 87
— Sel. 252	65	IVi	4. Sel. 252 = {	354	1	1
442					65	82
-365 d. in	7)37783				153 =	170 =
61 B.C.					Wed., June 2	Sat., June 19
77	5397 + 4					
				38072 ..		

In deference to the facts herewith evolved, it would be only fair to admit, all other element of the date being complied with, that the week-day character of the date for the capture of Jerusalem on the fast because of Jeroboam's sin, respectively the twenty-third of Sivan falling on Saturday, the nineteenth of June, in 61 B. C., would go to prove that this capture of Jerusalem by Pompey did actually take place in the 4653^d year of the Julian period or in the sixty-first year before the common Christian Era. But in default of most of the conditions of the date being fulfilled, that is to say, in the absence of all evidence to prove that this sixty-first year B. C. represented the true locality of Cicero's consulate, it becomes our mournful duty to declare that this solitary element goes for naught. Not only is this in

itself invaluable week-day characteristic unsupported by the major factors of the date, but it is otherwise too obscure and far-fetched a coincidence to form the basis for so important a date in history. So, coming back to our already-stated conclusion, we can only repeat our conviction that, meeting all requirements and fulfilling all conditions for the perfect verification of dates, the twenty-fifth day of May, being a Saturday, and being identical with the feast of Pentecost, is the only correct and matter-of-fact date for the taking of Jerusalem by Pompey, "*on the third month, on the day of the fast, upon the hundred and seventy-ninth olympiad* [in the third Olympiadic year, according to Josephus, or the first, according to Censorinus], when Caius Antonius and Marcus Tullius Cicero were consuls."

As a by-product of our research we may state with satisfaction that the proper site or locality for the third extra-intercalary day for the equation of the nineteen-year cycle with nineteen solar years appears definitely to have been found, viz. in the first month of the second year [sacred] of the cycle. It appears also that the fourth and last of the four twenty-four hour intercalations has been pointed out, or hinted at, in the first month of the fourth year of the nineteen-year cycle. If it shall be found that the date of Paul's fifteen days in Thessalonica shall require the intercalation of an extra day, we may conclude with assurance that we have found all four of the localities at which they are to be effected. In the meantime we shall continue to examine data for the reconstruction of the Jewish calendar, as we find them in the works of Josephus and in the books of the New Testament.

VOLUME III. CHAPTER VI

THE CRUX OF CHRONOLOGY AND THE CORRECTION OF THE CALENDAR

In passing beyond the date of Pompey's capture of Jerusalem, and proceeding to the date of Herod's capture of the City, we come across a date of immeasurable significance to the whole science of chronology in general and to the determination of Jewish data in particular. While the date referred to does not affect the formation and structure of the Jewish calendar as distinctly Jewish data serve to rebuild the calendar in vogue among the Jews, the proper definition of time before and after the assassination of Julius Caesar has a direct bearing on the correct determination of Jewish dates. Thus the very next date in Hebrew history, the taking of Jerusalem by Herod and Sossius, is incapable of establishment and satisfactory presentation without a previous stabilization of Roman chronology at this point. To attempt a solution of this veritable crux of chronology in the course of our comparison of the consular lists in a previous chapter, would have been a premature and foregone misadventure in our effort to ascertain the truth of history. In the present conjuncture, however, it is appropriate and opportune to consider the matter in the light of collateral evidence, now but not then, available.

Having, in the discussion of the consular lists, compared and harmonized the testimony of historians and chroniclers as to the time of Caesar's assassination and of the events leading up to the more effective alternative of deciding this question by means of astronomical calculations, as expressed and stated in the form and figures of the calendars then in use. On the part of the Syro-Macedonian or Jewish calendar we have now arrived at such a point of development that we may well avail ourselves of its distinctive Sabbatarian feature as a means of checking up on our account of days in a most surprising and satisfactory manner. On the part of the Julianized Roman calendar we are confronted with its very inception and constructive evolution. In the former, we may take advantage of the breaking-point in the close of the third nineteen-year lunar cycle of the IVth Calippic Period, and in the latter, of the starting-point of the Reformed Roman calendar, both of which find expression in the beginning of the 4669th year of the Julian Period or the forty-

fifth year before the commencement of the Christian Era. The seriation of days according to the Jewish or Syro-Macedonian method of keeping time will stand the test of criticism by virtue of its impressive simplicity and directness, while the enumeration of days according to the Julianized Roman system will be demonstrated by the simplest form of arithmetic.

Computing the number of days from the beginning of what we have called the Jewish-Roman or Asmonean-Herodian Era (on the twenty-fifth of Casleu, Sel. 148, or December twenty-second, 165 B. C. (excl.), to the end of the third cycle of the IVth Calippic Period terminating in 45 B. C., we have the following approved figures to add:

<i>Cal. Per.</i>	<i>Sel.</i>	<i>B. C.</i>	<i>Days.</i>
III ¹	148-153	or 165-160	1923
III ²	154-172	or 159-141	6940
III ³	173-191	or 140-122	6940
III ⁴	192-210	or 121-103	6940
IV ¹	211-229	or 102- 84	6940
IV ²	230-248	or 83- 65	6940
IV ³	249-267	or 64- 46	6940
			<hr/> 43563

Computing the period according to Roman chronology, we have (165-46=) 119 times 365 days, twenty-nine leap-year days, and nine days' remainder in 165 B. C.

$$\begin{array}{r}
 365 \times 119 \\
 \hline
 3285 \\
 365 \\
 365 \\
 \hline
 43435 \\
 29 \text{ l. y. ds.} \\
 9 \text{ ds. in 165 B. C.} \\
 \hline
 \end{array}$$

$$43563 - 43473 = 90 \text{ days in 45 B. C.}$$

showing that the Seleucic year 267 extended ninety days into the first Julianized Roman year J. P. 4669 or 45 B. C. Deducting these ninety days from 43563, the sum total of Jewish calendar days in the above described period, we find that the last day of the great year of confusion in the Roman system of chronology, 46 B. C., corresponded to the 43473rd day of the Jewish era, which, being the second last day of the ninth month Casleu, makes the 1st of January of J. P. 4669 or 45 B. C., the first year of Caesar's reformed calendar, equivalent to the thirtieth day of Apellaeus or Casleu, Sel. 267, the last day of the ninth lunation of the year.

Accordingly Mr. Page (in *New Light from Old Eclipses*, p. 68) has this comment to make: "According to the Julian calendar, the year began January first, with a new moon; but, by reckoning back by the Augustan years to that time, this date becomes January second; consequently, the new moon with which the first corrected year of Caesar began, fell, not on the first of January, according to our reckoning, but on the second; and it has actually been so calculated by every astronomer who has essayed the task. To reconcile the apparent contradiction of beginning the year on the second day of the month, it has been said that Julius Caesar made his first corrected year bissextile; the originator of this theory, losing sight of the fact that while the dictator was adding to the year of confusion it would have been quite as easy for him to have made one more intercalary day, and thus obviated the necessity of beginning his corrected era with a correction of itself. But in counting backwards, the theorist found one day too many; and failing to arrive at any more reasonable explanation, he marked out a mistaken path in which too many have followed."

The truth is, as a moment's research will discover, that the first of January of Caesar's corrected calendar corresponded, not to the first of Tebeth, Sel. 267, the day of the neomenia according to the lunar calendar in use among the Jews, but to the first of TUBI, the fifth month of the Egyptian year 703 of the Nabonassan era; that therefore Julius Caesar, in inaugurating his calendar, paid homage, not to the queen of heaven, but to the queen of Egypt, who began to rule as an independent sovereign from this time forth by the grace of Caesar.

Another correction to be made at this time by means of the Jewish seriation of days relates to the week-day character of Caesar's first New Year's day. Dividing the sum ascertained (p 345) by seven, $43474 \div 7 = 6210 + 4$, we obtain a result of 6210 perfect weeks and a remainder of four days, which tells us that the 43474th day of the era was the fourth day, or Wednesday, of the 6211th week, requiring a dominical letter E, not D or even CB, to denote the character of the calendar. This alteration of the Sunday letter, thus borne out and vouched for by the serial numbers of the Asmonean-Herodian era, is called for and postulated by the variation of days assigned to the months in Caesar's reformed calendar. By most chronologists the wrong number twenty-eight is attributed to February—a number which it did not obtain, until after thirty-six years' vogue, it was deprived of its twenty-ninth day for the benefit of August and reduced to its traditional twenty-eight in common years ever since. According to Suetonius, the tale of February was left intact and considered inviolably devoted to the worship of the infernal gods. According to Macrobius, it was, all religious considerations to the

contrary notwithstanding, reduced from twenty-nine to twenty-eight days in common years, the gods of the underworld being forced to yield worship and honor to a man who was blasphemously entitled the "awe-inspiring"—Augustus. The reports by the two historians differ in other respects, but whatever may have been the true disposition of days made by Caesar himself, the two accounts agree in this, that February was accorded TWENTY-NINE days in common years (not twenty-eight, as generally believed), and that, in leap years, its quota was increased to THIRTY days. Consequently, in the block of years which alone now concern us, the month of February consisted of twenty-nine days in 45 and 44 B. C., of thirty days in 43 B. C., and of twenty-nine days, again, in 42 B. C., etc., etc., and the fifth of March (III. Non. Martii) was not, as generally reckoned, the sixty-fourth, but the sixty-fifth day of the ordinary year, and not, in leap years, the sixty-fifth, but the sixty-sixth day of the leap year.

With these corrections in mind we may now essay to put the various claims of the different chronological schools to the calendric astronomical test. Now there are those who say 45 B. C. those who say 44 B. C., and those who say 42 B. C., is the year-date of Caesar's assassination. Which of these stoutly controverted years conforms to the calendric conditions reported and postulated by the historians? Let the contentions of each militant school be taken up in order.

Since various followers of the anachronistic school (like Wm. M. Page, Prof. C. A. L. Totten, and others), have quoted their protagonist, Dr. Samuel Farmar Jarvis, the author of a *Chronological Introduction to the History of the Church*, pp. 168-9), almost verbally and in full, we may agreeably present their view in his own words.

"But here there is a difficulty growing out of the question, whether the war of Julius Caesar in Spain, which ended in the subjugation of the sons of Pompey, occurred during the year of confusion [46 B. C.], or in the first year of Caesar's reformed calendar [45 B. C.]? In other words: whether that war occurred in the years 4667 and 4668 of the Julian period or in the year 4669? As it is universally agreed that Caesar was murdered on the fifteenth of March in the year which followed that war, the decision of this question, on whichever side it may turn, makes a difference of one year in the subsequent chronology....

"On the first of January of the first year of Julius Caesar, there was, as we have seen [?], a conjunction of the sun and moon. This is evident from his calendar, which begins with the golden number one, according to the lunar cycle of Meton. Instead of beginning his year as that of Numa's calendar began, at the

winter solstice, he waited for the first new moon after the solstice, that the revolutions of the sun and moon might commence together.

"The new moon, then, having been on the first of January in the first year of the reformed calendar, we are to see whether by astronomical calculations we can decide the above-mentioned question respecting Caesar's war in Spain.

"Hirtius, or whoever was the author of the history of Caesar's war in Spain, states that on the third before the nones of March, or, according to our computation, the fifth of March, occurred the battle of Soricia; that on the same day Pompey removed his camp against Hispalis, and was followed by Caesar; but that before Caesar commenced his march, the moon had risen about the sixth hour.

"The sixth hour, according to the Roman computation of time, was about midnight; and that the moon could not have risen at that hour on the fifth of March of the first Julian year, will be made evident on the slightest calculation. It was new moon on the first of January; and two lunations ($29 \text{ d. } 12 \text{ h. } 44' \times 2 = 59 \text{ d. } 1 \text{ h. } 28'$) ended early on the first of March. Consequently, on the fifth of March, the moon was not five days old. It could not possibly, therefore, have risen about midnight. If, on the other hand, this event took place in the year of confusion, it will be seen, on consulting the third column in the foregoing table of that year, that, according to the new arrangement of Caesar, the fifth of March, in consequence of the intercalation, was the 85th day of that year; and therefore, ($445 - 84$) the 361st day, reckoning backward, from the first of January of the first Julian year. Twelve complete lunations, reckoning backward, from the new moon on the first of January, would amount to $29 \text{ d. } 12 \text{ h. } 44' \times 12 = 354 \text{ d. } 8 \text{ h. } 48'$. That sum deducted from 361 days; leaves $6 \text{ d. } 15 \text{ h. } 12'$ as the time wanting to complete a thirteenth lutation, which, being taken from $29 \text{ d. } 12 \text{ h. } 44'$, leaves $22 \text{ d. } 21 \text{ h. } 32'$ as the moon's age on the fifth of March in the year of confusion. Consequently, the moon must have risen that night about fifty-nine minutes past eleven o'clock: *'Luna hora circiter VI visa est.'*"

Granting the correctness or near-rightness of the doctor's astronomical calculation, we must take issue with the rightness of his interpretation of the historian's words. Supposing it to be true that the moon became visible at Hispalis at 11:59 P.M. on the day specified, can it be true that Pompey's son broke camp at midnight, and that Caesar followed suit and pursued Pompey *after* the middle of the night? Because at the sixth hour of the night midnight does ensue, is it the sense of the historian that that was the time of Pompey's retreat and Caesar's pursuit? or did

he intend to say what was popularly meant by "the sixth hour of the afternoon"? What was the sixth hour of the clock is very plainly stated by Pliny (*Nat. Hist.* LII. § lxxix) and cited by Jarvis (*Chron. Intr.*, p. 433). "The day itself," says Pliny, "has been differently reckoned by different people; by the Babylonians, between the two sun-risings; the Athenians, between the two sunsettings; the Umbrians from midday to midday; all the vulgar from dawn to darkness, but *the ROMAN priests and they who have defined the civil day*, as well as the Egyptians and Hipparchus, FROM MIDNIGHT TO MIDNIGHT." If, then, by the Roman method of reckoning, the statement "from midnight to midnight" means twelve hours from midnight to noon, and again twelve hours from high noon to midnight, (just as we ourselves compute the twenty-four hours of the day), it stands to reason that "around six o'clock" ordinarily means 6 A. M. or 6 P. M., as the case may be. In this case, as it involves the rising of the moon, obviously the latter is meant.

Now, what is the probability in the case of Caesar's campaign in Spain? Is it likely that Pompey, though routed, would break camp after having spent the dark half of the night in its shelter securely? Or that Caesar would set out in pursuit of Pompey after a waste of six hours in idleness? If the bout was turned into rout while it was yet day, why wait until midnight to start a retreat or stage a belated pursuit? But if the pursuit was launched immediately after the defeat, without the intermission of a period of waiting for the moon to rise, is there not some other year in the complex under consideration which may have answered the requirements of history more satisfactorily?

We have seen that the year proposed and maintained by the chronology most commonly received affords no rising of the moon at midnight or at sunset on the fifth day of March. So what? Since "the March moon of 45 B. C., which was new on March first," says Prof. C. A. L. Totten (*Our Race News-Leaflet*, Nos. XLIII-XLIV, p. 64 and 71), "did not come to her third quarter and so rise about midnight until March twenty-third, he [our would-be opponent] must drop the arrival of the slaves down the calendar eighteen days after the date of the battle in order to find that day, in which Pompey moved, followed by Caesar, after a moon rising at mid-night!" Furthermore, if the battle of Munda was fought on the day following Caesar's arrival at Munda, and Plutarch tells us it was fought on the day of the Liberalia which falls upon the seventeenth of March in the calendar, "how could Caesar have delayed in the vicinity of Soricia until a midnight moon on a March twenty-third, 45 B. C., and still have accomplished all that followed and came before Munda and yet fought at Munda previously, to wit on March seventeenth?...One

might as well attempt to explain the darkness at the crucifixion by an eclipse of the sun right at the full moon (Nisan fourteenth) as to put the Spanish war in 45 B. C. in the face of these difficulties."

Similarly the second year of Caesar's reformed calendar, 44 B. C., is not fitted by nature to serve in the capacity of date for Caesar's war in Spain, nor is it claimed to be fit for the purpose by any known chronologist. As may be seen from the adjoining prospect, the fifth of March in 44 B. C. corresponded to the fourteenth of Dystrus or Adar, Sel. 268, which, according to the nature of a lunar calendar, suggests the age or stage of the respective lunation, as observed and connoted in Jewish fashion. This being the time of full moon, the moon, of course, could not rise either at the sixth hour of the night or the sixth hour of the afternoon, and being the 43903rd day of the Asmonean-Herodian era, and the sixth day of the 6272nd week, it may be appropriately described as Friday, the fifth of March according to the then current form of Caesar's calendar, J. P. 4670 or 44 B. C. (Sunday letter D), and dismissed without further comment as an impossible year for the date of Caesar's campaign in Spain.

The third year, however, of Caesar's reformed, but presently deformed calendar is not only dictated by the testimony of historical documents and marble monuments, but fitted by nature with the astronomical features and calendric characteristics required by the year of Caesar's war in Spain. This third year of Caesar's new calendar, (which was also the third year of a new nineteen-year lunar cycle), is the year decided on for this event by the metachronistic school of Dr. Gustav Seyffarth and others, who insisted that J. P. 4672 or 42 B. C. was the year of Caesar's assassination. That the later chronological allocations are correct is proven by the astronomical conditions of the two years mentioned. In the first place, the partial eclipse of the moon on March twenty-fourth as well as the total eclipse of the sun on April eighth, 43 B. C., go to prove that the moon came to her third quarter on the fifth day of March or, as it is perceived more readily, on the twenty-sixth of Adar or Dystrus, Sel. 270. This being the 44269th day of the Asmonean-Herodian era, or the first day of the 6325th week contained therein, the corresponding fifth of March according to the calendar deformed and vitiated that very year by a premature intercalation, is determined to be Sunday, the sixty-sixth day of J. P. 4671 or 43 B. C. (Dominical letters CB), the only year in the debateable period which can and does furnish a moon-rise "around the sixth hour of the afternoon" [*"luna hora circiter VI. visa est"*].

On the third before the nones of March, or, according to our computation, the fifth of March, occurred the battle of Soricia.

It was late in the afternoon of the same day when Pompey, forced by defeat, removed his camp and retreated to the neighborhood of Hispalis. If it had grown too dark for military manoeuvres (as men judged impossibilities in those days), the darkness of night would have ended the operations for the day. But the contingencies of the hour were different. Instead of suspending or ending hostilities when "it grew dark" as the custom was, new movements were made and carried out which were not contemplated by the commanding generals, for, just as the beaten army prepared to leave the field with the last rays of the setting sun, the moon rose above the horizon and the darkness was put off by the brightness of the three-quarter moon. In the brilliant light of that third-quarter moon, which thus miraculously prolonged the day of battle; Caesar pursued Pompey, and, like the Israelitish hero of Bethhoron, pressed his strategical advantage to the utmost. It is for this reason that the rising of the moon has been recorded. If its phasis had not been such as to influence the events of the day, it might never have been even mentioned by the historian.

In the second place, only the fourth Julianized year 42 B. C. can and does furnish the astronomic and calendric features that are demanded by history of the death-year of Julius Caesar. The principal postulates are these. In the year of Caesar's assassination, there must have been an obscuration both of the moon and of the sun in such notable proximity to the date of the "parricide" that men involuntarily brought both into connection with each other. For the bright light of the moon which fell on Calpurnia's face the night before her husband's murder must have been the sheen of the nearly full moon that had been totally eclipsed on the thirteenth of March, which, therefore, was said to have lost its lustre on the second day before his death on the "ides of March." (See Plutarch's *Lives*: "Caesar"). There must also have been a perceptible darkening of the sun that year, soon enough after the perpetration of the crime to admit of its association with the death of Caesar. Such an obscuration occurred on the twenty-eighth of March, 42 B. C., only thirteen days after the Parricide, and therefore within easy reach of the popular imagination as a godsent prodigy and portent of evil. In consequence of this partial, not total, but peculiarly pertinent phenomenon, poets, like Ovid, *Met.* XV. 782-90, and Virgil, *Georg.* 1. 408.464, declaimed and bespoke the dreadful meaning of these omens of the sky.

"The *Sun's* pale image gave so faint a light,
That the sad Earth was almost veil'd in night;
A dusky hue the morning star o'erspread,
And the *Moon's* orb was stained with spots of red."

Even sober biographers like Plutarch and naturalists like Pliny lay stress on the effulgence of a comet that "made its appearance in the north, while we were celebrating the games in honor of Caesar, and shone bright *for seven days*. It arose about the eleventh hour of the day, and was seen by all nations." (Pliny 1. ii. C. 25) On which peculiar coincidence Plutarch remarks: "The most signal phenomenon in the heavens was that of *a great comet*, which shone very bright *for seven nights* after Caesar's death, and then disappeared. To which we may add the fading of the sun's luster; for his orb looked pale all that year; he rose not with a sparkling radiance, nor had the heat he afforded its usual strength."

But whatever value, or lack of value, may be attributed to these astronomical observations of ancient writers, the astronomical calculations of any school-boy can furnish dependable proof that the year 42 B. C. was the death-year of Julius Caesar, and not the year 44 or 45 B. C. Just take the series of days as they occurred in the Asmonean-Herodian era in comparison with the succession of days as they elapsed according to the Roman calendar (reformed and deformed), and you will have the data at hand to identify the year of Caesar's campaign in Spain in 43 B. C. and the year of Caesar's death in 42 B. C. Thus:

Jewish vs. Julian.

$$\begin{array}{r} 43563 = \\ - \quad 90 \end{array} \qquad \begin{array}{r} 90 \text{ d. in 45 B.C.} \\ -90 \end{array} \qquad \mathbf{46}$$

$$\begin{array}{r} 43473 - 43473 = \\ \left. \begin{array}{r} 30 \quad 31 \\ 1 \quad 29(!) \\ 324 \quad 5 \end{array} \right\} \text{ds. in 45 B.C.} = 65 = \text{Thurs., March 5th, 45 B.C.} \end{array} \qquad \mathbf{45 E}$$

$$\begin{array}{r} 43563 \\ -43538 \\ \hline \text{Adar 29} - 25 = \text{Adar 4} \\ 7) \end{array} \qquad \begin{array}{r} 43538 \\ 300 \\ \hline 43838 \\ 31 \\ 29(!) \end{array} \left. \begin{array}{l} \text{ds. in 45 B.C.} \\ \text{ds. in 44 B.C.} = 65 = \text{Fri., March 5th, 44 B. C.} \end{array} \right\}$$

$$\begin{array}{r} 6219 + 5 = \text{Thurs.} \\ 43918 \\ -43903 \\ \hline \text{Adar 29} - 15 = \text{Adar 14} \\ 7)43903 \end{array} \qquad \begin{array}{r} 43538 \\ 300 \\ \hline 43838 \\ 31 \\ 29(!) \\ 5 \end{array} \left. \begin{array}{l} \text{ds. in 44 B.C.} \\ \text{ds. in 43 B.C.} = 66 = \text{Sun., March 5, 43 B.C.} \end{array} \right\}$$

44 D

43 CB

Jewish vs. Julian.

44657 300 ds. in 43 B.C.

44569

44569

44657	31	} ds. in 42 B.C.
-44644	29(!)	
	15	

31	} 42 A
29(!)	
15	

Adar 29 - 13 =

44644

75

7)

6377 + 5 = Thurs., Adar 16th,
Sel. 270

Thursday, March fifteenth, 42 B.C.

Assuming as correct that the battle of Pharsalia, by which Julius Caesar came into absolute power and by virtue of which Cleopatra became sovereign queen of Egypt in the fifth year of her total reign, we find that the five odd years of supremacy accredited to Caesar in the combined reigns of Julius and Augustus Caesar, terminate in the tenth year of Cleopatra's regency, as indicated by these figures in the *Chronicon* of Eusebius (see Clinton, *F. H.*, Vol. III, p. VII). These five odd years extend from the (nominal) ninth of August, 47 B. C., to the fifteenth of March, 42 B. C. They embrace the Alexandrian campaign and the correction of the calendar in the long year of confusion in 47-46 B. C., the campaign against Pharnaces and the African war in 45, the return to Rome with its triumphs and political activities (or shall we rather say *in*-activities?) in 44, the critical campaign in Spain in 43, and the Parricide in 42 B. C.,—all lined up and checked out by the series of Capitoline Roman years which enumerate the IIII (fourth) consulship of Caesar as the 708th, the Vth (fifth) consulship as the 709th and the prematurely curtailed VIth (sixth) consulship as the 710th year from the foundation of the City. However the undated portion of this period may be disposed of and explained away, the campaign in Spain and the assassination of Caesar cannot be placed earlier or later than the Spanish war in 43 and the Parricide in 42 B. C.

If, in order to emplace these events, we calculate from the final termination of the sixty-one-year period of rule ascribed to the first two Caesars, we count back from the death of Augustus, we find that (having deducted the five odd years of Julius Caesar, 61 - 5 = 56) the fifty-six odd years of Caesar Augustus began in [56 - 14 =] 42 B. C. Taking for granted as a natural probability and psychological necessity that Augustus, then known as Octavianus, proceeded to act immediately upon his claim as heir to the offices of Caesar, and did not wait until the following year to exert himself in behalf of his own interests, we may determine his period of power as extending from the month of August in

42 B. C. to the month of August in 14 A. D., or, to define it with almost perfect precision, from the last days of Nab. 706 to the very last day of Nab. 761.

In either way, therefore, the breaking point in the joint reign of the two Caesars will be found to reside in the year J. P. 4672 or 42 B. C. This being the case, we may safely rest our argument here for further confirmation as we go along. This we shall meet with abundantly, as we subdivide and analyze the reign of Augustus, which we must do in order to fix irrefragably the reign of Herod the Great and the life-time of Jesus the Messiah.

VOLUME III. CHAPTER VII

CAPTURE OF JERUSALEM BY HEROD AND SOSIUS

Akin to the capture of Jerusalem by Pompey is the capture of the Holy City by Herod and Sosius, both in point of its occurring at the same time of the year and its being recorded in almost the same phrase and mode of expression. So closely alike are the two descriptions of the two investment-dates that the Jewish historian remarks on the singular similarity of the two occurrences as fatalities, "as if a periodical revolution of calamities had returned since that which befell the Jews under Pompey." The two definitions, but for the Greek and Roman references, are almost literally the same. That pertaining to Pompey's capture reads: "For although the City was taken *on the third month, on the day of the fast*, on the 179th Olympiad, when Caius Antonius and Marcus Tullius Cicero were consuls at Rome;" that referring to Herod's capture: "This destruction befell the city of Jerusalem when Marcus Agrippa and Caninius Gallus were consuls at Rome, on the hundred and eighty-fifth Olympiad, on the third month, on the solemnity of the fast, as if a periodical revolution of calamities had returned since that which befell the Jews under Pompey; for the Jews were taken by him *on the same day*, and this was after twenty-seven years' time" (*Antiq. B. XIV. C. XVI. §4*)

Now, the correctness of this conclusion may be still further corroborated by a comparison of the chronological data relating to the Herodian or Sossian capture of the City with those of the Pompeian. In regard to the duration of the sieges leading up to the investments, both are declared to have taken place "*in the third month*" and "*after three months*" (Cf. *Wars, B. I, C. IX. §4* and *B. I, C. VII. §4*). In fact, by way of variation, the beleagerment on the part of the Idumean conqueror is sometimes prolonged to "*five months*" (*Wars, B. I. C. XVIII. §2*), sometimes even extended to *six months* (*Wars, B. V. C. IX. §4*). Yet, even in this wide margin of diversity, there is this sameness of synchronization that both Pompey and Herod began to busy themselves with siege preparations about the same time, the feast of unleavened bread or the Passover. In both cases, the seasons correspond from beginning to end. Thus, "when Pompey had ordered those that had controversies one with another [for instance Hyrcanus and Aristobulus] to come to him *in the beginning of spring*, he brought his army out of their *winter quarters*, and

marched into the country of Damascus." (*Antiq.* B. XIV. C. III. §2) "Now *as winter was going off*," or "*when the rigour of winter was over*, Herod removed his army and came near to Jerusalem, and pitched his camp hard by the City"—"before the temple, for on that side it might be besieged, and there it was that Herod intended to make his attacks in the same manner as did Pompey." (cf. *Wars*, B. I, C. XVII. §8, and *Antiq.*, B. XIV. C. XV. §14) And as Pompey, in the interval between the Passover and Pentecost, demolished the citadel at Apamea, mulcted the tyrant Ptolemy Menneus for a thousand talents, conquered the place called Lysias, and then passed over the cities of Heliopolis and Chalcis, by way of Pella, to Damascus: "so he [i.e. Herod] parted the work among the army, and demolished the suburbs, and raised three banks, and gave orders to have towers built upon those banks, and left the most laborious of his acquaintance at the works. But he went himself to Samaria to take the daughter of Alexander, the son of Aristobulus, to wife, who had been betrothed to him before, as we have already said; and thus he accomplished this by the bye, *during the siege of the City*, for he had his enemies in great contempt already." (*Wars* I, XVIII. §8) And, finally, as Pompey took with him that army which he was leading against the Nabateans, and the auxiliaries that came from Damascus, and the other parts of Syria, with the other Roman legions which he had with him (*Antiq.* B. XIV. C. III. §4): so Herod, "when he had thus married Mariamne [some time between the Passover and Pentecost], came back to Jerusalem with a greater army. Sosius also, after the marriage of Herod to Mariamne joined him with a large force, both of horsemen and footmen." (*Wars*, B. I, C. XVII. §9). At this point, the period of investment, which both beleagerments have in common, commenced. Both were practically conducted during the festive period known as the "week of weeks" or the "fifty days" (Pentecost), which always, but especially in Sabbatic years, drew an enormous concourse of people to the City, much to the detriment of the besieged, but vastly to the advantage of the beleagerers. Viewed thus in the light of other investments, every little circumstance of the one constitutes a bit of evidence for the true location of the other, that of Herod for that of Pompey, that of Titus for that of Herod, and vice versa.

Thus the circumstance that the siege by Herod and Sosius was terminated in a Sabbatic year before the season of sowing (which started in October and continued till February) could be said to have been prevented by the continuance of its Sabbatic character, renders the inference irresistible that the taking of Jerusalem cannot have taken place on any of the late dates assigned to Pompey's capture, say, on the tenth day of the

seventh month Tisri, or on the twenty-eighth day of the *ninth* month *Casleu*, as claimed by Reimar, Usher, Clinton, and others, but can have happened only in the first half of this particular Herodian Sabbath year. As these septennially consecrated twelvemonths extended from Nisan to Nisan, and not from the preceding Tisri to the succeeding Tisri, this Sabbatic year, "which was still going on, since Herod had now the government of all Judea put into his hands [§1] and "at this time [§2], now he had got Jerusalem under his power, . . . forced the country to lie still uncultivated, since we are forbidden to sow land *in that year*." (see *Antiq.*, B. XV. C. I. §2)

Equally decisive is the circumstance narrated by the historian in another place out of all connection with the siege. "*In the seventh year of his reign*," he says, "*when the war about Actium was at the height, at the beginning of the spring*, the earth was shaken, and destroyed an immense number of cattle, with thirty thousand men." (*Wars*, B. I.)

This unmistakeable reference to the great sea-fight at Actium enables us to limit the beginning of Herod's reign to the space of one month, viz. the third month. For since, as everyone knows, the battle of Actium was fought on the second of September, the seventh year of Herod must have begun sometime before this second of September, in order to include this date of the battle. But if, as we have reason to believe, with Dr. Seyffarth, Mr. Page, Prof. Totten, and others, that Jerusalem was taken by Herod and Sosius in 36 B. C., and the Actiac encounter occurred on the second of September, 30 B. C., [267 years before Censorinus composed his famous symposium of dates], it is obvious that any date for the capture of Jerusalem by Herod after the second of September, 36 B. C., automatically makes the seventh year of Herod go amiss of the epochal battle at Actium to the extent to which it is post-dated.

Beside, every belated dating of the capture of the City involves a corresponding miscarriage of other happenings at the beginning of the siege. Thus, if the tragic fall of the City be made coincident with the great fast of the Atonement on the tenth of Tisri, Herod's army would hardly be lying round about Jerusalem, "as soon as the rigour of winter was over," nor would Mariamne have been a bride of the lovely month of May if the twenty-eighth of Casleu be forced to do duty as the fast-day on which the City was captured by Herod. Any autumnal or early winter date is therefore peremptorily excluded.

If, on the other hand, we interpret the words of Josephus to mean a feast-day or fast-day *in the third month*, at least *of the calendar* if not of the siege, the adjustment of even the most minute circumstances is both easy and self-evident. Let us, then,

turn first to the determination of the year in which the Herodian capture of the City must have happened, and then the determination of the month and day of the month, on which the fall of the City must have fallen.

The historian tells us: "This destruction befell the city of Jerusalem *when Marcus Agrippa and Caninius Gallus were consuls at Rome, on the hundred and eighty-fifth olympiad, on the third month, on the solemnity of the fast*, as if a periodical revolution of calamities had returned since that which befell the Jews under Pompey; for the Jews were taken by him [i.e. Herod] *on the same day*, and this was after twenty-seven years' time." (*Antiq. B. XIV. C. XIV. §4*)

After perusing this long description of time, which certainly seems as complete and perfect as it is composite and comprehensive, it looks as if all further necessity for scrutiny and research were precluded from the outset. For, if we remember rightly, all or nearly all, known systems of chronology converged upon the Julian year J. P. 4651 or 63 B. C. as the one and only authentic date for the capture of Jerusalem by Pompey. Dr. Jarvis, it is true, contends for J. P. 4650 or 64 B. C., but Mr. Page and Prof. Totten, two of his otherwise faithful followers, concur with the advocates of the common chronology at least in this matter of dating the capture of Jerusalem by Pompey. But not only they: even the champions of a metachronistic chronology, Dr. Seyffarth, Ideler, and others, have joined the majority, as if for once to present a united front to the adverse forces of doubt and error. So much more staggering and bewildering our surprise to find a divergence of opinion as to the capture of Jerusalem by Herod. Josephus says (*Antiq. B. XIV. C. XIV. §4*), as plainly as words can make it, that "this was *after twenty-seven years' time*," yet Dr. Jarvis says Jerusalem was taken by Herod in J. P. 4676 or 38 B. C.; Usher, Clinton, and many others, in J. P. 4677 or 37 B. C.; Dr. Seyffarth, Mr. Page, Prof. Totten, and others, in J. P. 4678 or 36 B. C. How then can we approach this stronghold of dubious time-determination with any prospect of ascertaining the truth? There are two main avenues of approach—one from the front, the other from the rear.

If, on the one hand, we mete out the twenty-seven years of intermission by the years of the Olympiads, we shall observe the respective dates of Pompey's and of Herod's capture of Jerusalem engraved thus on the Olympiadic metron:

Olympiadic Years according to Josephus, according to Censorinus 66—65 B. C. or 64—63 B. C.

<i>Years</i>	<i>Olympiads acc. to Josephus</i>		<i>Olympiads acc. to Censorinus.</i>	
1	179 ¹	66-65 B.C.	179 ¹	64-63 B.C.
2	179 ²	65-64 B.C.	1. 179 ²	63-62 B.C.
3	179 ³	64-63 B.C.	2. 179 ³	62-61 B.C.
4	179 ⁴	63-62 B.C.	3. 179 ⁴	61-60 B.C.
5	180 ¹	62-61 B.C.	4. 180 ¹	60-59 B.C.
6	180 ²	61-60 B.C.	5. 180 ²	59-58 B.C.
7	180 ³	60-59 B.C.	6. 180 ³	58-57 B.C.
8	180 ⁴	59-58 B.C.	7. 180 ⁴	57-56 B.C.
9	181 ¹	58-57 B.C.	8. 181 ¹	56-55 B.C.
10	181 ²	57-56 B.C.	9. 181 ²	55-54 B.C.
11	181 ³	56-55 B.C.	10. 181 ³	54-53 B.C.
12	181 ⁴	55-54 B.C.	11. 181 ⁴	53-52 B.C.
13	182 ¹	54-53 B.C.	12. 182 ¹	52-51 B.C.
14	182 ²	53-52 B.C.	13. 182 ²	51-50 B.C.
15	182 ³	52-51 B.C.	14. 182 ³	50-49 B.C.
16	182 ⁴	51-50 B.C.	15. 182 ⁴	49-48 B.C.
17	183 ¹	50-49 B.C.	16. 183 ¹	48-47 B.C.
18	183 ²	49-48 B.C.	17. 183 ²	47-46 B.C.
19	183 ³	48-47 B.C.	18. 183 ³	46-45 B.C.
20	183 ⁴	47-46 B.C.	19. 183 ⁴	45-44 B.C.
21	184 ¹	46-45 B.C.	20. 184 ¹	44-43 B.C.
22	184 ²	45-44 B.C.	21. 184 ²	43-42 B.C.
23	184 ³	44-43 B.C.	22. 184 ³	42-41 B.C.
24	184 ⁴	43-42 B.C.	23. 184 ⁴	41-40 B.C.
25	185 ¹	42-41 B.C.	24. 185 ¹	40-39 B.C.
26	185 ²	41-40 B.C.	25. 185 ²	39-38 B.C.
27	185 ³	40-39 B.C.	26. 185 ³	38-37 B.C.
	185 ⁴	39-38 B.C.	27. 185 ⁴	37-36 B.C.
			186 ¹	36-35 B.C.

Like Julius Africanus and Eusebius, Josephus departs from the regular reckoning of the Olympiads, whether in blame-worthy error or in justifiable difference of opinion, but, measured by his own standard, he exhibited a consistency of opinion. From the month of May in the consulate of Cicero and Antony, when Pompey the Great captured the Holy City, to the month of May in the consulship of Agrippa and Gallus, when Herod and Sossius took possession of the City, is exactly twenty-seven full years. There is no room for suspicion that this count is not correct. On the other hand let us look at another way of arriving at the same result.

When we approach the date of Herod's taking his promised kingdom to himself, we may do this by keeping in touch with the strict observance of the septennial years of rest occasionally mentioned by Josephus. In this instance, the Sabbatic year is twice mentioned as current during the siege and for nine months after the storming of the City by Herod. In the first place, the beleaguered "were distressed by famine and the want of necessities, for this happened to be a Sabbatic Year." (*Antiq.*, B. XIV. C. XVI. §2). And this was certainly that part of the year which included the whole of spring and early summer. In

the second place, "this distress was in part occasioned by the covetousness of the prince regent, who was still in want of more, and in part by the Sabbatic Year, which was still going on, and forced the country to lie still uncultivated, since we are forbidden to sow the land in that year" (B. XV. C. I. §2). And this descriptive dating of the season as naturally attaches itself to that part of the year when the sowing and planting of grain was wont to be done, from October to February, consequently the second half of the sacred Jewish year. So, by these two emphatic specifications, the occupation of Jerusalem by Herod is definitely fixed to a certain seventh or Sabbatic year, which, being one in the long line of an ancient Septennial system, may be easily ascertained and certified, either by computing it from the first beginning of the Asmonean government, "a hundred and twenty-six years after it was first set up" (*Antiq.*, B. XIV, C. XVI. §4) or by calculating from the destruction of the City of Titus, which took place "one hundred and seven years later," in 70 A. D. In the one case, the duration of the Asmonean government comprised just eighteen septennial periods [$126 \div 7 = 18!$], the first of these 126 years, or the first year of the first week of years, being commensurate in the main with the Julian year J. P. 4552 or 162 B. C., is in immediate sequence to the 150th year of the Seleucidae 163–162 B. C., which is expressly designated and enumerated as a regular septennial *year of rest* (see I Macc. VI. 49, 53). This calculation makes 36 B. C. a year of rest, and therefore the probable year of Herod's accession. In the other case, the duration of twenty-eight periods of the Jewish priesthood amounted, according to Josephus' reckoning, to 107 years. "Accordingly," says he, "the number of the high-priests from the days of Herod until the day when Titus took the temple and the city, and burnt them, were in all twenty-eight; the time also that belonged to them was a hundred and seven years" (Josephus, *Antiq.* B. XX, C. X. §5). Now we do not know what authorities Josephus followed, or whether this was exclusively his own reckoning, but measured on the Sabbatic scale, his calculation exhibits an excess of two whole years. [$107 \div 7 = 15 + 2!$] For we not only know from Josephus that the year of Herod's capture was a Sabbatic year, but equally as well, from the Talmud, Seder Olam, and from Jewish tradition in general, that Jerusalem was destroyed in a year that was Sabbatic. Josephus strongly implies this in the extraordinary gathering of the people for the Passover feast of that year, and in the periodic revolution of the year "seven years and five months" after Jesus, the son of Ananus, had begun his ditty: "Woe, woe to Jerusalem!" which melancholy presage he commenced "four years," or rather, in the fourth year, "before the war began." [A. U. C.] [Varro

$815\frac{1}{2} + \frac{1}{2} + 3 = 819 + 3\frac{1}{2} = 822\frac{1}{2}$ A. U. C.] This makes Sel. 382 (sacred, corresponding pretty closely to A. U. C. 823) [Varro], a seventh or Sabbatic year, extending from the spring of J. P. 4784 or 70 A. D. to the spring of 4784 or 71 A. D. If, then, we reverse the revolutions of the fifteen seven-year periods from this point [J. P. 4783 or 70 A. D.], the 106th year before this will overlap and identify itself with Sel. 277 (sacred) or 36 B. C., and written out, so as to present all the seventh or Sabbatic years to the eye as they elapsed in the interval, they will look somewhat like this

No.	J.P.	Sel.	A.D.	Sum.	
1	4783	382	70	0	Seder Olam
	- 7	- 7	- 7	+ 7	
2	4776	375	63	7	Jos.
	- 7	- 7	- 7	+ 7	
3	4766	368	56	14	
	- 7	- 7	- 7	+ 7	
4	4762	361	49	21	
	- 7	- 7	- 7	+ 7	
5	4755	354	42	28	
	- 7	- 7	- 7	+ 7	
6	4748	347	35	35	
	- 7	- 7	- 7	+ 7	
7	4741	340	28	42	Luke 3:1
	- 7	- 7	- 7	+ 7	Luke 4:19
8	4734	333	21	49	
	- 7	- 7	- 7	+ 7	
9	4277	326	14	56	
	- 7	- 7	- 7	+ 7	
10	4720	319	7	63	} $7 \times 7 + 1 = 50$
	- 7	- 7	- 7	+ 7	
11	4713	312	1 B.C.	70	
	- 7	- 7	+ 7	+ 7	
12	4706	305	8	77	
	- 7	- 7	+ 7	+ 7	
13	4699	298	15	84	
	- 7	- 7	+ 7	+ 7	
14	4692	291	22	91	
	- 7	- 7	+ 7	+ 7	
15	4685	284	29	98	Jos. Ant. XV. V. 2
	- 7	- 7	+ 7	+ 7	
16	4678	277	36	105	Jos. Ant. XIV. XVI. 2. Jos. Ant. XV. 1. 2.

As 107 years are two years in excess of fifteen septennial periods, it is evident that the interval as computed by Josephus does not, and mathematically cannot deliver a Sabbatic year to both captures of Jerusalem by Titus and by Herod. If the first of this line of "seventh" years is founded on the Julian year J. P. 4783 or 70 A. D., and three at least of the thirteen intermediate "sevenths" are based on unmistakable, well-established foundations (the second on the third year before the beginning of Jewish war in the 12th year of Nero, i.e. 66 A. D.; the seventh, a Sabbatic Jubilee Year, as demonstrated by the $7 \times 7 + 1 = "50 \text{ years}"$ (John 8:57) seen in the interval between 22 B. C. and 28 A. D. (both inclusive), on the fifteenth year of Tiberius Caesar in 28 A. D.; and the fifteenth of this series on the initial year of the Egyptian Augustan Era in Nab. 719 or 29 B. C.), it is quite impossible to conceive how this high-priestly period of 107 years can land the last or sixteenth Septennial date in the year of Herod's capture of Jerusalem unless the date of its taking be reduced to 36 B. C. A reduction to J. P. 4678 or 36 B. C., of course, involves a reduction of the priestly period to $[15 \times 7 =] 105$ years, with the admission that, for once, the Jewish historian was mistaken in his estimate of its duration, or else the suspicion that he involuntarily erred in accepting without question an erroneous count of Roman consulates from the Latin historians and statisticians of the day.

According to the clear and cleancut statement of Censorinus, the most authoritative of Roman chronographers in the opinion of most modern chronologists, the same Nabonassan year 719, which is rated in the main as the "seventh year" of Herod's government, is registered, in Ptolemy's *Astronomical Canon*, as the first year of Augustus Caesar's rule as first Roman king over Egypt and emperor over the whole then-known world. This Nabonassan year, comprising, as it does, the authentic date of the sea-fight at Actium and the spring-time earthquake in Herod's seventh year, fixes this "seventh-year's" limits to about the same space as that occupied by the Olympiad year 741 and the Roman 717 according to the Capitoline computation. To be still more precise, we believe it extended from the month of May in J. P. 4684 or 30 B. C. to the month of May in J. P. 4685 or 29 B. C., thus comprehending in its scope, first, the seventh anniversary of Herod's capture of Jerusalem; second, the acme of the war about Actium; and third, the "beginning of spring," "in the seventh year of his reign," "when the earth was shaken and man and beast destroyed." This being so, the "seventh year" before this, both in the sense of Sabbatic seriation and of mere numerical sequence, must necessarily and incontestably be the twelvemonth from the month of May in the 4678th year of the

Julian Period or the thirty-sixth before the common Christian Era to the month of May in the 4679th year of the Julian Period or the thirty-fifth year preceding the Era Anno Domini. This year, too, must be the consulate of Agrippa and Gallus, during whose administration Josephus says the Holy City was taken, and Herod began his reign of thirty-four years *de facto*.

Now in order to get a true-to-life view of the lay of the consulates by which Josephus intended to date Herod's capture of Jerusalem, it is well to write them out in connection with the years of Rome according to the Capitoline computation, the years of the septennial Sabbatic series, the years of the Egyptian Nabonassan Era, and the years of the Julian Era and the Christian Era B. C. By this simple rule of thumb, we shall behold the true succession of consuls laid out before our eyes, as truly as twice two is four, or rather as truly as twice five is ten, for in this period of ten or twelve years which we propose to visualize in this scheme, we shall include the two full five-year terms of the second triumvirate as well as the seven-year term of the Sabbatic week of years which intervened between the accession of Herod as king of Judea and the accession of Augustus as sole ruler of the world.

<i>Ol. (Cen.-Eus.)</i>	<i>A. U. C.</i>	<i>Consuls</i>	<i>Sab.</i>	<i>Nab.</i>	<i>J. P. or B. C.</i>
184 ³ —185 ¹	711	M. Aemil Lepidus II & L. Munatius Plancus		II 707	4673—41
184 ⁴ —185 ²	712	P. Servil. Vatia Isaur. II. & L. Anton. Pietas		III 708	4674—40
185 ¹ —185 ³	713	Cn. Domit. Calvinus II & C. Asinius Pollio		IV 709	4675—39
185 ² —185 ⁴	714	L. Marc. Censorinus & C. Calvis. Sabinus		V 710	4676—38
185 ³ —186 ¹	715	Ap. Claudius Pulcher & C. Norbanus Flaccus		VI 711	4677—37
185 ⁴ —186 ²	716	M. Agrippa & L. Caninius Gallus		VII. 712	4678—36
186 ¹ —186 ³	717	L. Gellius Poplicola & M. Cocceius Nerva		I 713	4679—35
186 ² —186 ⁴	718	L. Cornificius & Sex. Pompeius		II 714	4680—34
186 ³ —187 ¹	719	L. Scribonius Lobo & M. Antonius II.		III 715	4681—33
186 ⁴ —187 ²	720	C. Caesar II. & L. Volcatius Tullus		IV. 716	4682—32
187 ¹ —187 ³	721	Cn Domit. Ahenobarbus & C. Sosius		V 717	4683—31
187 ² —187 ⁴	722	C. Caesar III. & M. Val. Mess. Corvinus		VI 718	4684—30
187 ³ —188 ¹	723	C. Caesar IV. & M. Licinius Crassus		VII 719	4685—29

A glance at this synopsis of Roman consulships enables us to see that, whether we follow the time-honored seriation of the Capitoline count, by which it is designated the 723rd year from the foundation of Rome, or whether we retrace the era of Augustan years as enumerated by the Egyptians, in which case it is the first of the series of 267 from the autumnal days of Censorinus in 238 A. D., the consulship of C. Caesar IV and M. Licinius Crassus is located by either process in the same chronological

locality in which we have, proposed to place the "*seventh year*" of Herod's reign. In the first place, we have placed it here in conformity to the date of the "war about Actium," which, according to common consent, was waged in the consulship of Caesar (III) and Corvinus: therefore fought in the seventh year of Herod's government of Judea. In the second place, we have placed it here in compliance with the Sabbatic count of years according to which the second Sabbatic year of Herod's reign commenced in the spring of this consulate of Caesar IV and Crassus; consequently the seventh year of compulsory rest of the land consolidates with itself the seventh year of Herod's acquisition of power. If, then, we reverse the seven years of Herod's sovereignty, Nab. $719-7=712$, A. U. C. $723-7=716$, J. P. $4685-7=4678$, or VII-7=0, in whatever way we please, we arrive at the 4678th year of the Julian Period or the thirty-sixth year before the beginning of the Christian Era, and the corresponding contemporary year of other eras, as the proper date for the capture of Jerusalem, and the beginning of his kingship, by Herod the Great. It comports with every element of synchronization mentioned by historian or chronicler, and must therefore appear as self-evidently the true date of the event, as demanded by the data. But how about the "Fast" in the third month, and the "same day" as that twenty-seven years before?

However content we may be with the determination of time (as to the year) of Herod's capture of Jerusalem, we are still unsatisfied as to the calendric qualifications of the minor factors of this date. According to Josephus, both captures, by Pompey and by Herod, occurred on "*the same day*," both "*on the day of the Fast*," and both "*on the third month*." Whether it was the third month of the calendar or the third month of the campaign, or both, and on what distinguished fast or feast it was that the surrender of the City devolved, we shall now determine by an exhaustive recalculation of the available holidays of the first half of the sacred Jewish year.

As we have before this intimated, every one of the trinity of dates, 38, 37, 36 B. C., has been most solemnly and ceremoniously commended to our acceptance by one chronological school or another. And as we have also observed, paradoxically, we did not see the capture of Jerusalem by Pompey assigned by the majority of chronologists to 65 B. C., as might be expected in all consistency, but, contrariwise, almost exclusively and without exception, to 63 B. C. And, as we have seen the estimate of the historian as to the size and duration of the interval simply set aside, without any attempt at emendation or correction, so we have also witnessed the utter disregard of the septennial or Sabbatic Scale of Years as a norm and measure of time, whereas

it should, like a godsend from heaven, have been hailed with delight and appropriated with devotion to direct men's minds to the one and only date to be considered for the taking of Jerusalem by Herod and Sossius. What, then, can be done in such a pandemonium of confusion?

Well, we can appeal to the cycles of the heavens for the verdict which science (falsely so called) has failed to bring in. If we work out the evolutions of the solar and lunar cycles, and compare with the results the lunations of the years as they appeared to men living in 38, 37 and 36 B. C., or J. P. 4676, 4677 and 4678, we may, so to speak, call heaven and earth to witness, to testify and declare which of these three years agreed and corresponded with the twenty-seventh year before its own celestial currency, 38 with 65, 37 with 64, or 36 with 63 B. C.?

Calculating, first, the diurnal contents of the eight Metonic or nineteen-year lunar cycles incorporated (so far as indicated) in the Third and Fourth Calippic Periods, up to the end of the seventh Seleucic year (sacred 274) in the spring of 38 B. C., we shall add the product of $7 \times 354 = 2478 + 60 + 3 = 2541$ days to the number of days preceding these seven years in the Asmonean-Herodian Era [43563].

<i>Cal. Per.</i>	<i>Sel. (sacred)</i>	<i>B.C.</i>	<i>Days.</i>
III. 1.	Sel. 148-153 or	165-160 =	1923
III. 2.	Sel. 154-172 or	159-141 =	6940
III. 3.	Sel. 173-191 or	140-122 =	6940
III. 4.	Sel. 192-210 or	121-103 =	6940
IV. 1.	Sel. 211-229 or	102- 84 =	6940
IV. 2.	Sel. 230-248 or	83- 65 =	6940
IV. 3.	Sel. 249-267 or	64- 46 =	6940
IV. 4.	Sel. 268-274 or	45- 38 =	2541
			46104

With the aggregate of 46104 days on the Jewish side of the ledger, we will now compare the amount to be arrayed on the Julian side. This being a period of 126 years, 126 times 365 is $45990 + 31$ leap-year days plus nine days' remainder in 165 B. C., we have 46030 days to subtract from the 46104 days on the Jewish side, to obtain the serial day of the year J. P. 4676 or 38 B. C., on which the last day of the Jewish calendar fell. This being ascertained to have been the seventy-fourth day of 38 B. C., we may now proceed to diagram the form and features of the respective calendars as they appeared to contemporaries for the years 38 to 36 B. C.

		<i>Jewish.</i>	<i>Julian.</i>			74	74
46104		46104	74			+ 65	+ 82
+ 65		177	177	CB			
7)46169	8. Sel. 275 =	30	30			139 =	156 =
		177	177	38		Wed., May 18	Sat., June 4
6595 + 4			458				
			-366 d. in 38 B.C.				
46488		46488	92	A			
+ 65		0	0			92	92
9)46553	9. Sel. 276 =	354	354	37		+ 65	+ 82
			446			157 =	174 =
6650 + 3			-365 d. in 37 B.C.			Tue., June 6	Fri., June 2
46842		46842	81				
+ 65		0	0	G			
10)46907	10. Sel. 277 =	354	354			81	81
			435	36		+ 65	+ 82
6701 + 0			-365 d. in 36 B.C.			146 =	163 =
		47196	70			Sat., May 26	Tue., June 2

Comparing the calendric features of the three cycle-years, the eighth, ninth, and tenth or Sel. 275—277, with the phases of the moon as displayed in a set of almanacs for the corresponding years of the Julian Period, to wit, J. P. 4676, 4677 and 4678, we will find that, according to Caesar's arrangement of the cycles [as contradistinguished from Joseph Scaliger's arrangement in the Julian Period], the lunations in the calendar begin one or two days after the astronomical instant, in other words, the neomenias in the almanac are noted a day or two later than they actually occur in the heavens. Consequently, in order to make the astronomical phenomena appear on paper as they appeared to the contemporaries of Caesar, Herod and Mariamne, Antony and Cleopatra, Agrippa and Gallus, we shall have to add one or two days to the date of the astronomical instant to obtain the date assigned to the first of the month, the beginning of each lunation, in the calendar, or the date of historic record. We can most conveniently secure a correct alignment of these calendric data if we add six to the respective year numbers of the Julian Period or consult an ephemeris of the corresponding years 1926, 1927 and 1928 A. D., seeing that they exhibit the lunations peculiar to the eighth, ninth and tenth years of a lunar cycle, as follows:

38 B. C. (1926 A. D.)	37 B. C. (1927 A. D.)	36 B. C. (1928 A. D.)
January 13-14	January 3	January 21-22
February 12	February 2	February 20-21
March 13-14	March 2-3	March 21
April 12	April 1	April 19
May 11-12	May { 1 29-30	May 19
June 10	June 28-29	June 17
July 9-10	July 28	July 16-17
August 8-9	August 26-27	August 15
September 6-7	September 25	September 13-14
October 6-7	October 25	October 13-41
November 5	November 23-24	November 12
December 5	December 23	December 11-12

If now we execute the miniature calculations relating to the date of the feast and fast-days of the third month [Sivan], respectively the sixth day of Sivan or sixty-fifth day of the year and the twenty-third of Sivan or the eighty-second day of the year, we shall discover in a moment that, according to the historical cycles of Calippus, the sixth day of Sivan [Pentecost] fell on a Wednesday, May eighteenth, in 38 B. C.; on a Tuesday, the sixth of June, in 37 B. C.; on a Saturday, or Sabbath, May twenty-sixth, in 36 B. C. According to the purely astronomical cycles of the Creator, the sixth of Sivan (or Pentecost), in 38 B. C., six days after the eleventh to twelfth of May, therefore, at the latest, on the seventeenth to eighteenth of May [Tuesday-Wednesday]; in 37 B. C., six days after the thirtieth of May, therefore at the earliest, on the fifth to sixth of June [Monday-Tuesday]; in 36 B. C., six days after the eighteenth to nineteenth of May, therefore, as required, on or near the twenty-sixth of May, a Saturday.

If, on the other hand, we compute the coincidence of the twenty-third of Sivan, the eighty-second day of the year, which was, indeed, a fast-day, but a rather hazy and nebulous mourning-day, we shall find that, according to the same Calippic cycles, the fast on account of Jeroboam's sin fell, in 38 B. C., indeed, on a Saturday, June fourth, while in 37 B. C. it fell on Friday, June twenty-third, and in 36 B. C. on Tuesday, June twelfth, leaving us stranded with a date of month and day of the week suitable enough in itself, but wholly unsuitable as regards the year of the date.

In regard to the former, however, the date of Pentecost falling on Saturday, the twenty-sixth of May, in 36 B. C., nothing need be said except that no date except a genuine, historically authenticated time-determination can so fully and perfectly meet all requirements and conditions imposed upon it, as this date of Herod's capture of Jerusalem has done. It falls into the

consular year of Agrippa and Gallus, into the fourth year of the 185th Olympiad (when interpreted consistently with the private scheme of Josephus), into the twenty-eighth year [27 full years] after Pompey's capture of Jerusalem, 126 years after the rise of the Maccabees, in the third month of the sacred Jewish year (Sel. 277), and on the sixth day of said third month Daesius or Sivan, being both a national holiday or religious festival and a seventh Sabbath of the Pentecostal holiday period. As the City had fallen into the hands of Pompey the Great on Saturday, the twenty-fifth of May, in 63 B. C. coincident with Daesius or Sivan sixth, Sel. 250, so Jerusalem fell again into the hands of the conqueror, Herod the Great, on the same holiday, Pentecost, the sixth day of Daesius or Sivan, Sel. 277, being Saturday, the twenty-sixth of May, J. P. 4678 or 36 B. C. But is there another way of proving with absolute certainty that the sixth of Sivan or twenty-sixth of May was a Saturday?

If we divide the serial number of the Julian Period for 36 B. C. $4678 - 7 = 4671 \div 28$, to obtain the dominical letter for this year according to Caesar's arrangement of the solar cycle, we observe that the twenty-third year, indicated by the remainder

$$\begin{array}{r}
 28)4671(166 \\
 \underline{28} \\
 187 \\
 \underline{168} \\
 191 \\
 \underline{168} \\
 23
 \end{array}$$

is marked G, which again indicates that the year so indicated begins and ends with a Monday. Hence the twenty-sixth of May, being the 146th day of the year, was $146 - 6 = 140 \div 7 = 20 + 0$, that is to say, a Saturday.

We put it down, then, as a fact attested by heaven and earth, that, as Jerusalem fell on a Sabbath-Fast-day, the sixth of Daesius or Sivan, Sel. 250, or Saturday, the twenty-fifth of May, 63 B. C., so it fell again, after an interval of twenty-seven years, on the same Sabbath-Fastday, the sixth day of Daesius or Sivan, Sel. 277, or Saturday, the twenty-sixth of May, 36 B. C. Herod was then, by right of appointment and in point of fact, the possessor of a kingdom, a king. Yet the hereditary king was then still living. Antigonus was not beheaded until late in the fall of 36 B. C., and Herod was not crowned king until the next ensuing national holiday. That was the commemoration of the cleansing

of the Temple by the ancestors and progenitors of the dynasty just come to an ignominious end. And that is the other event alluded to in Josephus' account of the double celebration of his own coronation anniversary and the magnificent dedication of his own newly-built temple, and all on the annual Feast of the Dedication observed and solemnized in commemoration of the Temple's cleansing by the Maccabees in 165 B. C. For the sake of future reference, we shall calculate it now.

On the assumption that the 276th year of the Seleucidae (hieratically reckoned) came to an end on the 46842nd day of the Asmonean-Herodian Era, on the eighty-first day of the Julian year, J. P. 4678 or 36 B. C., we shall obtain the serial enumeration for the date of the Feast of Lights in 36 B. C. by adding 177 days for the first half of the year Sel. 277, thirty days for Hyperberetaeus or Tisri, twenty-nine days for the month of Dios or Chesvan, and twenty-five days for the month Apelleus or Casleu to the 46842 days of the Era, thus:

$$\begin{array}{r} 46842 \\ + 261 \\ \hline 47103 \end{array}$$

By adding the same number of days (261) to the eighty-one days in the Julian year J. P. 4678 or 36 B. C., we obtain, as the date of the feast of Dedication and Herod's coronation, the 342nd day of the year, or the eighth of December, as enregistered in post-reformation times. Dividing the sum total of days in the Era by seven will indicate the week-day character of the day, thus: $47103 \div 7 = 6729$ weeks, without remainder, proving that the last day of the total was also a last day of the week, or a Sabbath. An appeal to any ephemeris or almanac marked with a dominical letter G, confirms the fact that this double holiday was also a seventh or Sabbath day. We shall now proceed to the consideration of another momentous, monumental date built, as it were, on the foregoing as a certain, unquestionable foundation; the feast of Herod's dedication of the newly-built temple and the annual feast of Herod's coronation anniversary, merged into one giant celebration on the national Feast of Lights, and crowned with the Catholic religious solemnization of the day as the Feast of the Immaculate Conception of B. V. Mary, the mother of Jesus Christ, the Author and Founder of the Christian religion and the namesake of the common Christian chronology.

VOLUME III. CHAPTER VIII

DEDICATION OF HEROD'S TEMPLE

on the

FEAST OF THE DEDICATION

HEROD'S CORONATION ANNIVERSARY

and

FEAST OF THE IMMACULATE CONCEPTION

The next direct point of contact between the Jewish and Julian calendars, enabling us to fix the form and reproduce the features of the former, is the doubly compounded date of Herod's dedication of his newly-built Temple on the feast of Dedication and Herod's nineteenth anniversary celebration of his coronation on the same day. As Herod's coronation coincided in the first place in 36 B. C. with the time honored Feast of the reconsecration of the Temple by the Maccabees, so, nineteen years later, the gorgeous ceremony of dedicating the newly constructed edifice called the "Holy of Holies" coincided with the memorial day of the king's coronation which from the first had fallen on the Feast of Dedication. This fact is affirmed by Josephus in terms as plain and positive as language can supply (*Antiq. B. XV. C. XI. §6*). He says: "For *at the same time* with this celebration for the work about the temple, fell also the day of the *king's inauguration*, which he kept of an old custom as a festival and *it now* coincided with the other: which coincidence of them both made the festival most illustrious."

The first question we shall have to ask is: when was Herod's coronation day in 36 B. C.? On what date of the Julian calendar did the historical feast of the Dedication fall? Since the twenty-fifth of Apelleus or Casleu was the $[177 + 30 + 29 + 25 =]261^{\text{st}}$ day of the hieratic or ecclesiastic Jewish year, and 4684 days of the Jewish-Roman Era preceded the beginning of Sel. 277, the year in which Herod took the crown and got himself a kingdom, the

addition of these two sums ($46842 + 261 = 47103$) will indicate the place this dedication-day occupied in the serial enumeration of days; and a division by seven will tell what week-day character this triple holiday possessed: ($47103 \div 7 = 6729 + 0$): leaving no remainder, proves that it was a Sabbath. If, again, we add 261 days to eighty-one, the eighty-first day in the Julian calendar corresponding to the last day of the preceding Jewish year, we shall find that the 47103rd day of the Hebrew Era or the 261st day of Sel. 277, to wit, the twenty-fifth of Casleu, corresponded to the $(81 + 261 =)$ 342nd day of the Julian Roman year, J. P. 4678, which, translated into terms of month and day, is Saturday, the eighth of December, 36 B. C. (Cal. G). This date not being expressly stated, we shall first of all prove beyond peradventure that it is authentic, and as fit to be used as a test-case in the reconstruction of the Jewish calendar as if authorized by legitimate history, and then adapt it to the form and constitution of the calendar. We proceed to the proof by three different methods of demonstration.

In the first place, building directly upon the result of the preceding calculation, we shall advance on an avenue of approach requiring no knowledge of the interior arrangement or inside composition of the intervening period; and this because of its obvious simplicity and consequent safety. Since the interval between king Herod's first coronation and his nineteenth anniversary is exactly nineteen natural years or the content of a full nineteen-year lunar cycle as Josephus reports *Antiq. B. XV. C. XI. §1* and §6, where he relates that "Herod, in the eighteenth year of his reign . . . undertook to build of himself the temple of God," and that "the temple itself was built by the priests in a year and six months", the easiest, quickest and best way to computing the interval is to straightway add the 6940 days of a complete Metonic cycle to the sum total of days in the Jewish Era prior to 277 S. E., when Herod was created and crowned king. We have seen this to have been 46842 days, the last day of Sel. 276 corresponding to the eighty-first day of the Julian year 36 B. C. Adding now the 6940 days of a perfect Metonic cycle, we have $46842 + 6940 = 53782$ days, the final coinciding again, of course, with the eighty-first day of the Julian year J. P. 4697 or 17 B. C. Adding to both of these sums the serial valuation of Casleu twenty-fifth, the day of dedication and coronation, in the Jewish calendar, we obtain the following correlation:

	53782	..	81
7)54043	261		261
<hr/>	<hr/>		<hr/>
7720 + 3	54043	..	342 = Tuesday, December eighth, 17 B.C. (Cal. D.).

Thus we arrive at one bound at the result; the date of Herod's

dedication of his temple on the nineteenth anniversary of his coronation, which, whether we desire it or not, will stand immutable and unquestionable as the actual date of occurrence in the lives of king Herod and his contemporaries. We may fairly hold this in reserve as one of the dates adapted to prove the form and constitution of the Jewish calendar, and, being well established, as one of the proof-dates in the reconstruction of that calendar.

But for this very reason, because it is too direct and un-circumstantial, we must turn to a more detailed and itemized mode of calculation, one that will take note of the various kinds and processes of intercalation and inner adjustment. To this end we shall, second, compute the date of the Temple dedication by Herod in a combination of cycle and year calculation. This may be visualized in the following way:

<i>Cal. Per</i>	<i>Sel.</i>	<i>B.C.</i>	<i>Days.</i>	
III. 1.	148-153	or 165-160	= 1923	
III. 2.	154-172	or 159-141	= 6940	
III. 3.	173-191	or 140-122	= 6940	
III. 4.	192-210	or 121-103	= 6940	
IV. 1.	211-229	or 102- 84	= 6940	} = 27760
IV. 2.	230-248	or 83- 65	= 6940	
IV. 3.	249-267	or 64- 46	= 6940	
IV. 4.	268-276	or 45- 37	= 6940	
				50503

The remaining years, constituting the first half of the next nineteen-year cycle, and leading up to the first year claimed by any school of chronology to be the eighteenth regnal year of king Herod, to wit, Sel. 287 to 293, or 26 to 20 B. C., are then computed separately. On the Jewish side of the ledger we have seven lunar years of 354 days each, with two embolismic months of thirty days each and three extra intercalary days inserted respectively in the first, second and fourth years of the cycle, thus: $354 \times 7 = 2478 + 60 + 3 = 2541$ days, which, added to the aforementioned aggregate 50503, makes a sum total of $(50503 + 2541 =)$ 53044 days, which have all come and gone before the beginning of Sel. 294 (in 19 B. C.), the first of the several years said to have been the eighteenth year of Herod's reign.

The *third* way of figuring out the same result being in fact nothing else than the long method of computing the Asmonean-Herodian era from Dedication Sel. 148 to Dedication Sel. 294, 295 and 296, without methodical regard to the disposition of the years in cycles, we may anticipate this long calculation now, and then compute the Julian calendar side only once. Adding the days contained in $[164 - 19 =]$ 145 lunar years, viz. 51330, plus the days contained in $[6 \times 7 \div 42 + 6 + 3 + 2 =]$ 53 embolismic

months of thirty days each, [1590] plus the $7 \times 4 + 3 = 31$ extra intercalary days, plus the residue of ninety-three days contained in Sel. 148 (sacred), and we obtain the sum of 53044 days.

Applying the same long method in the case of the Julian calendar for the same period of 145 years, we have 145 times 365 days = 52925, with thirty-six leap year days, and the residue of nine days left over in 165 B. C., the sum total of $[52925 + 36 + 9 =]$ 52970 days. Deducting these 52970 days of the Julian count from the 53044 days of the Jewish count, we have seventy-four days remaining in 19 B. C., as the number of days in the Julian calendar corresponding with an equal number, the last seventy-four, at the close of the Jewish-Seleucic year 293. We may now compute the date of Herod's temple dedication in the three following years, Sel. 294, 295 and 296, and the Julian years, J. P. 4695, 4696 and 4697 [or B. C. 19, 18 and 17], as favored respectively by Dr. Jarvis, Clinton, Page, and Totten, and so forth.

<i>Jewish</i>				
53044	53044 ..	74 d. in 19 B.C.		74
177 } 30 } 84 }	8. Sel. 294 = { 177 30 177	177 { 30 177	d. in Sel. 294 19 G	177 } 30 84 }
7)53335		458		365 =
7619 + 2		-365 d. in 19 B.C.		Mon., Dec. 31st
53428	53428 ..	93		93
0 } 261 }	9. Sel. 295 = { 0 354	0 { 354	d. in Sel. 295 18 FE	0 261
7)53689		447		354 =
7669 + 6		-366 d. in 18 B.C.		Fri., Dec. 19th
53782	53782	81		81
0 } 261 }	10. Sel. 296 = { 0 354	0 { 354	d. in Sel. 296	0 261
7)54043		435	17 D	261
7720 + 3		-365 d. in 17 B.C.		342 =
	54136 ..	70 d. in 16 B.C.		Tues., Dec. 8th

With the dates thus obtained, let us now compare the date established as the true historic day of Herod's inauguration into his kingdom, to wit, Dedication-day, the twenty-fifth of Apelleus or Casleu and the eighth day of December, 36 B. C. In 19 B. C., the year claimed by Dr. Jarvis to have been the nineteenth year of Herod's reign, the feast of Dedication fell on Monday, the thirty-first of December, twenty-three days later than Herod's anniversary. In 18 B. C., said by Clinton and others to have been

Herod's nineteenth regnal year, the festival of Dedication fell on Friday, the nineteenth of December, failing by eleven days to coincide with Herod's anniversary. In 17 B. C., the year determined on by Dr. Seyffarth, Mr. Page, Prof. Totten, and others, the memorial day of the Maccabean dedication coincided with the memorial day of Herod's coronation, as asserted by Josephus, and this coincidence occurred on December eighth, 17 B. C. or J. P. 4697. The statement of the fact is sufficient. There can be no further argument as to which of the three years was the actual nineteenth year of Herod's reign.

There can, however, be a corroboration of this result. The additional confirmation of our conclusion comes this time through the medium of the Olympic scale and the series of Sabbatic years. Speaking of Herod's foundation of the Augustan city in Palestine afterwards known as *Caesarea* Sebaste, Josephus says (*Antiq.* B. XV. C. IX. §6): "Now upon his observation of a place near the sea, which was very proper for containing a city, and was before called Strato's Tower, he set about getting a plan for a magnificent city there.... This city is situated in Phoenicia, in the passage by sea to Egypt, between Joppa and Dora.... The city itself was called *Cesarea*.... So this city was thus finished *in twelve years*." In a later passage, however, (*Antiq.* B. XVI. C. V. §1-3), as if to correct himself, he says: "About this time it was that *Cesarea* Sebaste, which he had built, was finished. The entire building being accomplished *in the tenth year*, the solemnity of it fell *into the twenty-eighth year of Herod's reign*, and into the hundred and ninety-second Olympiad.... and as for the *Olympic games*, which were in a very low condition, by reason of the failure of their revenues, he recovered their reputation, and appointed revenues for their maintenance, and made that solemn meeting more venerable, as to the sacrifices and other ornaments; and by reason of this vast liberality, he was generally declared in their inscriptions to be one of the perpetual managers of *those games*."

Now, unless some divers and erroneous computation of the Olympiads be introduced, no other exhibition of the games can come into consideration here as the one witnessed and patronized by Herod the Great than the stadium of the 193rd Olympiad, which normally and naturally fell into the summer season of J. P. 4706 or 8 B. C. As the king, so far as we know, was never away from home for more than one summer season at a time, his attendance on the opening games of this specific contest was not after an intermission of a whole winter, or several winters, his voyage or journey to Greece must indeed have been made some time *before* the opening of these games (*in* and *during* the 192nd Olympiad, as affirmed by Josephus), but not a twelve month or

two before the impending contest. The intermission between his departure from home and his arrival in Greece can have been one of days and weeks, or even months (taking in the dedication of Caesarea and other cities), but not one of years, as alleged by some chronologists. The truth, therefore, appears to be that Herod, undertaking to rebuild the ancient stronghold "Strato's Tower" into a great memorial city in honor of the deified Augustus in the tenth year before his twenty-eighth regnal year, which coincided with the greater part or, at least, the latter half of the 768th Olympiad year [=fourth year of Olympiad 192, =9-8 B. C.], he undertook also, almost simultaneously, "*in the [same] eighteenth year of his reign*, to build of himself the temple of God." (*Antiq.* B. XV. C. XI) Being pronounced synchronous with the twenty-eighth year of Herod, the chronological position of Olymp. 193—is still further strengthened by the here rigid seriation of Sabbatic years. For if the reign of Herod began in summer of a regular "seventh" year in 36 B. C., then the solemnity of the dedication of Caesarea Sebaste fell into the late spring or early summer of a Sabbatic year in 8 B. C., whether we reckon the Sabbatic revolutions ($4 \times 7 = 28$ years) from 36 B. C. or ($11 \times 7 = 77$ years) from 70 A. D. And if the foundation of the city by Herod was laid ten years prior to this date, it was accomplished in the late spring or early summer of the same *eighteenth* year of Herod's reign, in which he undertook to build the Temple. That was near or about Pentecost in J. P. 4696 or 18 B. C. It follows, then, that, if the inner Temple, or so-called "Holy of Holies," was erected and ready for dedication in one year and six month [vid. the better half of 18 B. C. and almost the whole of 17 B. C.], the triple celebration of Herod's coronation together with his dedication of the new temple on the traditional dedication-day of the old Temple, occurred on the twenty-fifth of Apelleus or Casleu of the Seleucic year 296 or the eighth of December, J. P. 4696 or 17 B. C.

This was, as we have said, a triple celebration. There is, however, still another occurrence connected with this very day, the eighth of December, 17 B. C., which sheds a more than planetary brilliance on this date, and which, unlike the other happenings, has preserved its lustre in undiminished splendor. The anniversary of king Herod's inauguration has been forgotten, the centennials of the Maccabean cleansing of the Temple are neglected, but even after two thousand years, the memorial of this occurrence is perpetuated and promulgated more than ever. This occurrence pertains most intimately and delicately to the mother of Jesus, the blessed Virgin Mary. Indissolubly associated with the feast of greatest brilliancy, it is consecrated to the memory of her life's first moment, the very inception of her

existence on earth. It is what devout worshippers the world over denominate the "Immaculate Conception" of the blessed virgin by her own mother Johanna, or St. Anna, "the grace of Jehovah."

The date assigned to this occurrence—the eighth of December—was designated, with the force and finality of canonical law, as the "Feast of the Immaculate Conception of the B. V. Mary" by papal decrees as well as by the private declarations of Catholic churchmen the world over. Pope Sixtus IV, by a decree of Feb. 28, 1476, appropriated the feast on this day for the entire Latin Church. Pope Alexander VII, in the famous constitution "*Solicitudo omnium Ecclesiarum*," promulgated dogma and date on the eighth of December, 1661. Pope Pius IX., in the noted encyclical of December eighth, 1854, "*Ineffabilis Deus*," defined the dogma, and definitely fixed the date, of the Immaculate Conception on the eighth of December, not determining, however, the year of the world in which the event occurred.

Many of the Fathers of the Church, in appreciation of the specific festival character of this date have applied various metaphors and figures of speech to the mother of Jesus. Comparing the youthful maiden to the Temple that was dedicated that day with rejoicing and resounding devotion; that was graciously and in mercy visited by the son of her virginity, and that was summarily purged by the fire of his zeal some forty-six years later, St. Gregory of Neo-Caesaria styles her "the living Temple of God;" St. Chrysostom, "a living Temple for Himself;" St. Dionysius of Alexandria, "Christ's Holy Tabernacle, not made with hands;" and St. Proclus, the patriarch of Constantinople, "the Bridal Chamber, in which the Word of the Father espoused our human nature." Referring to the furnishings and various paraphernalia of the Temple, St. Ephraim calls Mary "the Rod of Aaron," "the Vessel filled with manna," "the holy root of Jesse," "the Golden Censer," "the incorruptible Wood of which the Ark was constructed," "the Candelabrum of seven lights," "the Immaculate Vesture of Him who clothes Himself with light as with a garment," etcetera, etcetera. Alluding even to the topographical features and chronological elements of the great celebration of December eighth, 17 B. C., the same saintly father describes the mother of Jesus as "the holy Mountain in which it hath pleased God to dwell," and as "the Place most easily containing Him who knows no place," while the patriarch of Constantinople, St. Proclus, surpasses everything in the way of chronological allusion when he refers to the blessed virgin as "the Festival of saving reconciliation" (imagining, it seems, that she was born on the Day of Atonement [*yom kippur*] of the following year, though this was not the case). Allowing for the greater

glory of the daughter than of the mother, the Greeks, Syrians, Copts, and other Catholic Oriental people, have changed the name of the feast from "the Conception of St. Anne" to "The Immaculate Conception of the Virgin Mary," though, in respect to the date, they are still at variance with each other.

To convince ourselves, however, that there is no cause or occasion for this ethnological discrepancy as to the date, let us consider for a moment the ceremonial and conventional sides of the event. To us it seems a self-evident truth that the occurrence under discussion was just such an event as might be expected to evolve from just such a celebration as that of December eighth, 17 B. C., whether it be contemplated with the deep emotion of a pious worshipper or scarcely considered worthy of respect in the lighter vein of the impious blasphemer. From either point of view, whether in keeping with the awe-inspiring economy of grace or just simply in accord with laws of common nature, it seems as divinely appropriate, as naturally fitting, that the life, at least, of her who enshrined and tabernacled Him in the flesh, whose entire Life from beginning to end, was one perfect liturgical framework, should, in a measure at least, be likewise defined and limited liturgically by the feasts and fasts of the Jewish ritual. It is no more than meet and right that joyous events should have occurred on days of joy and sad events on the days of sadness, and so, whether we conceive of the fact of December eighth, 17 B. C., as the espousal of the Divine Spirit or as the ordinary, or very extraordinary, wedding of a human wooer with the mother of Mary, the time appointed and appropriated as a date for its occurrence is a point beyond reproach. If, then, we have shown that the eighth of December, 17 B. C., did, as a matter of fact, correspond and synchronize with the Feast of Lights or Illumination, the Dedication of the Herodian Temple and the nineteenth anniversary of Herod's inauguration, all falling on one and the same date, the twenty-fifth of Apelleus or Casleu, Sel. 277, we have the right, and the prerogative of the right, to assert that this super-extraordinary date enwombs within itself all the elements of inherent probability. It is so plausible and self-explanatory that we may as well say at once: It is so.

But however plausible and supremely probable in itself, we are not without positive historiographical evidence for the final determination of this date. Referring to the third year of Nero, the year of grace 57 A. D., Father Anderdon, in his *Fasti Apostolici*, p. 90 [with an appeal to S. Dion. Areopag. *De Divin. Nominib.* C. 3, Father Halloix's *Life of the Saint*, C. VI., *Zaccaria Raccolta*, V, VIII., etc.], puts this passage on record: "*This year, probably soon after S. Paul's arrival in Jerusalem, died the Ever-Blessed*

Mother of God, and was assumed into Heaven, in the seventy-second or seventh-fourth year of her age." If, then, according to these figures, the mother of Jesus was translated into her celestial abode on the fifth of August, 57 A. D., having nearly completed the last year of her life, she must have entered upon this life of seventy-two or seventy-four years, either in 16 B. C. or 18 B. C., her Nativity occurring on September eighth, and her Conception, nine months earlier, in 17 B. C. or 19 B. C. Only one of these alternatives can be correct. That the latter cannot be correct, is obvious from the fact that, in 19 B. C., the Feast of Lights, falling always on the twenty-fifth of Apelleus or Casleu, fell this time on the very last day of the year, the thirty-first of December, 19 B. C., disclosing a discrepancy of twenty-three days. There can therefore, be only one choice, and that is the right one. Emerging like a rock from the surging waves and counter-currents of the sea, so, from the more or less complicated computations and re-calculations of chronology, the eighth day of December, 17 B. C., may well be taken to stand for all eternity in the falls-filled and cataract-interrupted stream of time, unshaken and unmoved, sublimely fit to serve as does a landmark or a milestone in the measuring and meting out of time. Arrived at by straightforward methods and reached without transposing, redisinging or posing of any kind, the unadulterated product of plain, undrugged arithmetic, this date may well be employed as a mainstay and prime factor for the establishment and reconstruction of the Jewish or Syro Macedonian calendar. Referring in particular to the location of the fourth extra-intercalary day required by the need of equating the nineteen-year lunar cycle with solar time, we are justified in drawing this general conclusion, that the *fourth* day of "Badhu," bissextile, leap-year or extra-intercalary day was not (and should never be) injected into the calendar before the eleventh year of every nineteen-year cycle. For whereas any interpolation, even of a day, would to that extent dislodge and disarrange the date of Herod's inauguration, his dedication of the Temple and the Maccabees' dedication of the Temple, and on the head of it the Immaculate Conception of the Blessed Virgin, and whereas this multiplex date is shown to be, and must abide, a constituent part of the tenth year of the cycle, it follows as a matter of course that, if there is a site or chronological locality to be found anywhere in the body of a nineteen-year lunar cycle for a fourth necessary day of intercalation, it must be found after the tenth, but never before the eleventh year of the cycle. Indeed, having assured ourselves before this, that there can be, and must be, no interpolation of a single day in the broad belt of years constituting the lower half of a nineteen-year cycle, it follows again as a matter of logical necessity, that said *fourth*

intercalary day, necessary for the equation of the cycle, must be placed in said eleventh year of the cycle itself. We may therefore conclude that, since we are sure to find still further corroboration of this fact in other test-cases along the lines of this same zone or belt of years, we may proceed to the examination of the next date considered suitable for trial and test of our reconstructed calendar. We conclude with a brief computation of

$$\begin{array}{r}
 365 \\
 - 23 \\
 \hline
 342 \\
 - 81 \\
 \hline
 261 \text{d. } 10. \text{ Sel. } 277 = \left\{ \begin{array}{r} 0 \\ 354 \end{array} \right\} \begin{array}{l} 81 \text{ d. in } 17 \text{ B.C.} \\ 0 \text{ d. in Sel. } 277 \end{array} \quad \begin{array}{r} 81 \\ 0 \\ 261 \end{array} \Bigg\} \begin{array}{r} 365 \\ \hline \text{Dec. } 8 = 342 \\ \hline 23 \text{d.} \end{array}
 \end{array}$$

$$\begin{array}{r}
 435 \\
 - 365 \text{ d. in } 17 \text{ B.C.} \\
 \hline
 17 \text{ D} \\
 \text{Tues., Dec. } 8, 17 \text{ B.C.}
 \end{array}$$

$$\begin{array}{r}
 54136 \dots 70 \\
 11. \text{ Sel. } 278 = \left\{ \begin{array}{r} 30 \\ 1 \\ 147 \end{array} \right\} \left\{ \begin{array}{r} 30 \\ 1 \\ 147 \end{array} \right\} \text{d. in Sel. } 278 \\
 (\frac{1}{2} \text{ year}) \\
 +4 \\
 \hline
 54314 \quad 248 \\
 \hline
 54317 = \quad + \quad 3 \text{ d. in Sel. } 278 \\
 \hline
 251 = \text{Wed., Sept. } 8, 16 \text{ B.C.}
 \end{array}$$

VOLUME IV. CHAPTER I

CHRISTMAS, THE NATIVITY OF JESUS CHRIST.

The next available and withal "suitable" test-case for the reconstruction of the Jewish calendar has been happily designated by St. Chrysostom "the metropolis of Christian festivals." It might as aptly have been termed the "acropolis or citadel of Christian chronology." For, as we have already shown, in another connection, the date of Christmas, or the Nativity of Jesus Christ, is so powerfully entrenched and strongly fortified, both by natural position and artificial reenforcement, that its towering strength may well suggest the similitude of an impregnable mountain fastness, like the fortress city of Jerusalem. It is so fully and perfectly a prize-crowned acropolis of sacred chronology that it is well worth our while to thoroughly appraise both the advantages of its emplacement and the difficulties of its occupation. To form a correct estimate of its beauties it is absolutely essential that we take stock of the impediments and drawbacks we are bound to overcome. The more thoroughly we do this, the better for our appreciation of the subject.

Before we advance to the attack of this unquestionably difficult problem on the ground, so to speak, it is necessary that we see clearly in thought or theory what difficulties confront us in reality. To this end we shall take a view of the situation "from the air," so to speak, if we may compare the theoretical and hypothetical approximations of modern astronomers with "the crystal fields of air."

As the most poorly informed student of history knows, the time allotted to the great event under discussion spreads broadly over an entire decade of years, from 7 B. C. to 3 A. D. This decade, therefore, must constitute both the largest extent and the narrowest limit of our inquiries. The justification for this definition must be found in the following survey of figures and names, all purporting to present the best results of the best efforts that the best scholarship of the day was able to produce in the way of determining the time when the Author of the Christian Dispensation was born.

<i>Cal. Per. Sel.</i>	<i>Authorities</i>	<i>Nab.</i>	<i>J.P. or B.C.-A.D.</i>
V ² . 1. 306	Ideler, Sanclemente, Tillemont, Mann, Priestly, Benedictine Fathers (authors of <i>L'Art de Verifier Les Dates</i>), et al.	741—2	4707—7
V ² . 2. 307	Kepler, Capellus, Dodwell, Pagi, Guinness, Lewin, et al.	742—3	4708—6

<i>Cal. Per. Sel.</i>	<i>Authorities</i>	<i>Nab.</i>	<i>J.P. or B.C.-A.D.</i>
V ² . 3. 308	Chrysostom, Petavius, Prideaux, Playfair, Hales, Sheldon, Blair, Clinton, Jarvis, et al.	743—4	4709—5
V ² . 4. 309	Sulpitius Severus, Lamy, Bengel, Anger, Wieseler, Greswell, Anderson, Lloyd, Ussher, Goodenow, Dimbleby, Totten, et al.	744—5	4710—4
V ² . 5. 310	Irenaeus, Tertullian, Clemens Alex., Casiodorus, Orosius, Eusebius, Syncellus, Baronius, Calvisius, Vossius, Paulus, Page, et al.	745—6	4711—3
V ² . 6. 311	Epiphanius, Jerome, Bede, Satian, Sigonius, Scaliger, Russell, Elliott, et al.	746—7	4712—2
V ² . 7. 312	Chronicon Alex., Dionysius Exiguus, Martin Luther, Labbaeus, Pearson, Hug, Shimeall, Thomas, et al.	747—8	4713—1
V ² . 8. 313	Herwart, Norisius, et al.	748—9	4714—1
V ² . 9. 314	Paul of Middelburg, et al.	749—50	4715—2
V ² . 10. 315	Lydiat, et al.	750—1	4716—3

A.D.

That the limitation of dates for the Nativity to just this one decade (B. C. 7 to 3 A. D.), neither more nor less, is warranted and particularly appropriate, will become increasingly apparent as we view the years in their order as the first ten years of second Metonic or nineteen-year lunar cycle of the Vth Calippic Period. In the light of this illustrious series of Seleucic years, we shall be able to see matters of fact as they really occurred in the history of that period. They are enrolled as the 306th to the 315th years of the kingdom of the Greeks, and may be compared, for a more perfect regimentation, with the years of the imaginary Julian Period, J. P. 4707 to 4716, as well as with the Julianized Roman years as they were then in vogue. It was the time of the deformed "reformed" calendar being re-reformed. If, then, it be remembered that, in consequence of a difference in the arrangement of the solar and lunar cycles, the seriation and enumeration of Caesar's cycles differ from Scaliger's cycles, it will be profitable to compare the decade to be discussed (B. C. 7—3 A. D.) with the ten years of modern times, 1919 to 1928 A. D. In doing so, let it not be forgotten that, while the lunar months of the Jewish calendar will appear to begin one or two days later than the astronomical instant, the Julianized Roman dates may also appear, due to an excess of bissextiling, a day or two later than the actual phases of the new moons. Nevertheless the lunations, theoretical and historical, will agree closely enough to enable us by means of their approximation to determine the year-location of certain historical events and matters of fact. For the benefit of those who have not preserved their almanacs for the modern decade referred to, we subjoin the following diagram.

1	2	3	4	5	6	7	8	9	10
7 B.C. 1919	6 B.C. 1920	5 B.C. 1921	4 B.C. 1922	3 B.C. 1923	2 B.C. 1924	1 B.C. 1925	1 A.D. 1926	2 A.D. 1927	3 A.D. 1928
Jan. 2	Jan. 20	Jan. 8	Jan. 27	Jan. 16	Jan. 6	[. Jan. 9]	Jan. 14	Jan. 3	Jan. 22
Jan. 31	Feb. 19	Feb. 7	Feb. 26	Feb. 15	[. Jan. 21]	Jan. 24	Feb. 12	Feb. 2	Feb. 21
Mar. 2	Mar. 20	Mar. 9	[. Mar. 13]	Mar. 17	Mar. 5	Feb. 22	Mar. 13	Mar. 3	Mar. 21
Mar. 31	[. Apr. 3-4]	[. Mar. 23]	Mar. 28	Apr. 16	Apr. 4	Mar. 24	Apr. 12	Apr. 1	Apr. 19
Apr. 30	Apr. 18	Apr. 8	Apr. 26	Apr. 15	May 3	May 22	May 11	May 30	May 19
May 29	May 18	May 7	May 26	June 14	June 2	June 21	June 10	June 29	June 17
June 27	June 16	June 6	June 24	July 13	July 1	July 20	July 9	July 28	July 16
July 26	July 15	July 5	July 24	[. July 16]	[. July 31]	Aug. 19	Aug. 8	Aug. 27	Aug. 15
Aug. 25	Aug. 13	Aug. 3	Aug. 22	Aug. 12	Aug. 30	Sept. 17	Sept. 6	Sept. 25	Sept. 13
Sept. 23	Sept. 12	Sept. 1	Sept. 20	Sept. 10	Sept. 28	Oct. 17	Oct. 6	Oct. 25	Oct. 13
Oct. 23	Oct. 11	Oct. 1	Oct. 20	Oct. 10	Oct. 28	Nov. 16	Nov. 5	Nov. 24	Nov. 12
Nov. 22	Nov. 10	Nov. 29	Nov. 18	Nov. 8	Nov. 26	Dec. 15	Dec. 5	Dec. 23	Dec. 11
Dec. 22	Dec. 10	Dec. 28	Dec. 18	Dec. 7	Dec. 25				

With a view to making a comparison of the historical years of the Calippic Period with the hypothetical years of the Julian Period not only possible, but easily feasible, we shall set the stakes of demarcation at both ends of this ten-year interval. As apparent to the most casual observer, the first nineteen-year cycle of the Fifth (Vth) Calippic Period came to a close in the spring of 7 B. C., and the ten-year interval in the spring of 4 A. D., leaving the last nine years intact in the second cycle, nineteen years intact in the third, and likewise nineteen years intact in the fourth cycle of the Fifth Calippic Period, besides one whole cycle of nineteen years and a fraction of a year in the second cycle of the Sixth (VIth) Calippic Period. In this balance of years left after the ten-year interval at issue we have a certain number of days which must be kept inviolate, as we have no authority or warrant to augment or diminish their number by a single day. On the Jewish side of the ledger, computing the fraction of a year in Cal. P. VI.² at 128 days (as figured out pp. 269-270), and the last nine years of the second cycle of Cal. P. V as being equal to 3307 days, ($354 \times 9 = 3186 + 120$ days in four embolismic months + one extra-intercalary day =) 3307 ds., we arrive at the landmark on the cisterior side of the ten year interval, which we may not transgress with impunity in our calculations of that period: thus:

<i>Cal. Period</i>	<i>Sel.</i>	<i>J.P. or A.D.</i>	<i>Days.</i>
VI. ²	382 ..	4783 — 70	128
VI. ¹	363-381 ..	4764-82 — 51-69	6940
V. ⁴	344-362 ..	4745-63 — 32-50	6940
V. ³	325-343 ..	4726-44 — 13-31	6940
			<hr/>
			20948
V. ²	316-324 ..	4717-25 — 4-12	3307
			<hr/>
			24255

On the Julianized Roman side, if we add together the product of [A. D. 69-3 =] $66 \times 365 = 24090 + 16$ leap-year days plus the 218 days in 70 A. D., we obtain 24324 days. Subtracting from this sum of 24324 days on the Julian side the accumulation of days on the Jewish side, 24255, we reach the result that the last day of the Jewish count is coeval with the last day of the sixty-nine left over in J. P. 4717 or 4 A. D.; in other words, Adar 29, Sel. 315, is equivalent with March tenth, 4 A. D.

On the ulterior side of this ten year interval, the landmark staking off the extreme extent of the debatable ground may be arrived at by a simple process of addition, thus:

<i>Cal. Per.</i>	<i>Sel.</i>	<i>J.P. or B.C.</i>	<i>Days.</i>
III. 1.	148-153 ..	4549-4554 or 165-160	1923
2.	154-172 ..	4555-4573 or 159-141	6940
3.	173-191 ..	4574-4592 or 140-122	6940
4.	192-210 ..	4593-4611 or 121-103	6940
IV. 1-4.	211-286 ..	4612-4687 or 102- 27	27760
V. 1.	287-305 ..	4688-4706 or 26- 8	6940
			<hr/> 57443

By a little multiplication and addition on the Julian side, we may secure the Roman date corresponding to the last of these 57443 days, thus: B. C. $164 - 7 = 157 \times 365 = 57305$, which, augmented by the thirty-nine leap-year days due to be inserted and the nine days left over in 165 B. C. after the twenty-second of December, the beginning of the Era, supplies the number of days (57353) elapsed to the beginning of the Julian year in which the ten-year period of special probation begins. To come to precise terms, deducting these 57353 days of the Julian calendar from the 57443 days of the Jewish count, we see that the 57443rd day of the Jewish Era was tantamount to the ninetieth day of the Julian year J. P. 4707, or in other words, it is evident that the twenty-ninth of Adar, Sel. 305, was equal to the thirty-first of March, J. P. 4707 or 7 B. C.

Thus by a simple process of arithmetic, we have seen that the space of time to be especially investigated extends from the thirty-first of March, 7 B. C., (exclusive) to the tenth of March, 4 A. D. (inclusive). We have seen that, unless we were willing to introduce changes and alterations, not only unwarranted, but irremediable, we could not see our way clear to move the boundaries either a day forward or back. This fact becomes increasingly clear if we indulge in a few small calculations. Subtracting 57443 from the total aggregate of days in the Jewish-Roman Era, 85330 days, we find only 27887 days remain from the beginning of the second nineteenth cycle of the Vth Calippic Period to the end of the Asmonean-Herodian Era, while the subtraction of 20948 from $27887 = 6939$ will show that, in the handling of this ten-year interval, we are about to deal with the only Metonic cycle in the makeup of the Asmonean-Herodian Era which is admittedly defective, in that it is lacking or short one day in one of its intercalations, or else by reason of one day's omission. The sum 20948 being the total of days belonging to the last four nineteen-year cycles or fractions thereof (13-70 A. D.), and 27887 the total of days from the end of the ten-year interval to the end of Jewish

independence, the difference between the two ($27887 - 20948 =$) 6939 reveals the number of days that actually belonged to that Metonic cycle, not a day more and not a day less.

And taking, once more, from this deficient cycle—6939 instead of 6940 days—the number contained in those nine last years of the cycle which do not enter into our investigation, i.e. 3307 from 6939, we have the utmost number of days—3632—that we will have to dispose of in our arrangement or reconstruction of the calendar for the debateable decade of the Seleucic era, 306 to 315 or of the Christian era 7 B. C. to 3 A. D.

Now we need not remind a long-suffering reader that, in this decade of lunar years, there must be three intercalations of a month and three intercalations of a day, to coordinate the Jewish calendar with the Julian. But it is desirable to come to an understanding as to when and where these intercalations are to take place. As to the insertion of the months, all are agreed that the first should take place in the third year of the cycle, and the third in the eighth. As to the second insertion, opinions are divided, some placing it in the fifth, others in the sixth year. From a comparison of modern times it would seem that, having a full complement of thirteen lunations, the sixth year, 2 B. C., would be more suitable for an insertion than the fifth, 3 B. C., which has only twelve. But the conclusion of the *Encyclopedia Britannica*, that the second intercalation took place in the fifth year, consequently in 3 B. C., is fully substantiated by history—a fact for which we stand ready to furnish a timely demonstration when we come to a consideration of Paul's first convention with Peter during his first visit to Jerusalem after his conversion. We shall therefore concur with this foregone conclusion of the learned, and agree to introduce the second embolism of one month in 3 B. C.

And as to the extraordinary intercalary days, of which three are to be distributed within the compass of this decade, the first will find its proven emplacement in the first month of the first year, the second in the first month of the second year, and the third in the first month of the fourth year. We shall find further approval for the emplacement of the third extra day in our calculation of Paul's Passover with Peter in 36 A. D.

With this explanation as a proviso, we shall now proceed to visualize the complexion of the ten Syro-Macedonian, or Jewish, years, Sel. 306 to 315, which have one and all been represented as bearing unmistakably the physiognomy of the original Christmas year, as follows:

		<i>Jewish.</i>	<i>Julian.</i>		
57443		57443	90	F	90
1		30	30		1
261	1. Sel. 306 =	1	1	d. in Sel. 306	261
7)57705		324	324		352 =
8243+4			445		Wed., Dec. 18
			-365 d. in 7 B.C.		
57798		57798	80	E. D	80
1		30	30		1
261	2. Sel. 307 =	1	1	d. in Sel. 307	261
7)58060		324	324		342 =
8294+2			435		Mon., Dec. 7
			-366 d. in 6 B.C.		
58153		58153	69		69
29!		177	177		29!
261	3. Sel. 308 =	29!	29!	d. in Sel. 308	261
7)58443		177	177		359 =
8349+0			452		Sat., Dec. 25
			-365 d. in 5 B.C.		
58536		58536	87		87
1		30	30		1
261	4. Sel. 309 =	1	1	d. in Sel. 309	261
7)58798		324	324	B	349 =
8399+5			442		Thurs., Dec. 15
			-365 d. in 4 B.C.		
58891		58891	77		77
261	5. Sel. 310 =	354	354	d. in Sel. 310	261
7)59152			431	A	338 =
8450+2			-365 d. in 3 B.C.		Mon., Dec. 4
59245		59245	66		66
30		177	177		30
261	6. Sel. 311 =	30	30	d. in Sel. 311	261
7)59536		177	177	GF	357 =
8505+1			450		Sun., Dec. 22
			-366 d. in 2 B.C.		
59629		59629	84		84
261	7. Sel. 312 =	354	84	E	261
7)59890			438		345 =
8555+5			-365 d. in 1 B.C.		Thurs., Dec. 11
59983		59983	73		73
30		177	177		30
261	8. Sel. 313 =	30	30	d. in Sel. 313	261
		177	177	D	364 =
			457		Wed., Dec. 30

	<i>Jewish.</i>	<i>Julian.</i>		
7)60274		-365 d. in 1 A.D.		
8610+4		92		92
60367	60367	+354 d. in Sel. 314	C	261
261	354	446		353 =
9. Sel. 314 =		-365 d. in 2 A.D.		Sun., Dec. 19
7)60628		81		81
8661+1		354 d. in Sel. 315	BA	261
60721	60721	434		342 =
261	354	-366 d. in 3 A.D.		Thurs., Dec. 7
10. Sel. 315 =		69	G	69 =
7)60982				Sat., Mar. 10
8711+5				
	61075			
7)61075				
8725+0				

It goes without saying (at least it should pass as an axiomatic truth), that, being born in Judea, a Jew born of a Jewess, and a son of David born in the city of David, Jesus, later of Nazareth, was governed by laws and customs distinctively Jewish. This being so, it must follow, as a self-evident deduction, that the birthday of Jesus must be calculated in the terms of the Jewish calendar, not in those of a foreign or imported time-reckoning. The day on which He was born, being the Feast of "Lights," as intimated in His assertion: "I am the Light" (John VIII. 12), was, of course, the twenty-fifth day of Apelleus or Casleu; and being a Sabbath-day besides, as indicated by His allusion to His circumcision (John VII. 22), was, of course, a doubly-sanctified holiday. It is, therefore, an inexorable demand of history and tradition, that the birthday of Jesus, the twenty-fifth of Casleu, should fall on the twenty-fifth of December, the traditional date of the Nativity, and that both should fall on what the Jews denominated a Sabbath, and the Gentiles a Saturn's day.

We have put it down as a matter of course that the birthday of Jesus Christ was the twenty-fifth of Apelleus or Casleu, and that beyond the peradventure of a doubt; for the following reasons: The commonly accepted date for Christmas cannot be considered as an integer or isolated item of time. It is a complex date, or a part of a complex of dates. And being, not a unit, but a multiplex composite of time-determinants, so constituted in themselves, and so connected with each other, that the whole combination of data stands consolidated as one irreducible complex, the series of dates comprising a duration of 458 days and

including the day of the annunciation to Zacharias, the father of John the Baptist, and the day of the nativity of Jesus Christ, must stand undivided and inseparable by any sort of analysis or disintegrating process whatsoever. All stand or all fall together. The sum of 458 days, from the twenty-fourth of September in one year to the twenty-fifth of December in the next, cannot be augmented or diminished except by the unwarranted addition or omission of a day in three contemporary calendars, in the Jewish, the Julianized Roman, and the Egyptian calendars, and that simultaneously.

Now we have seen that a bissextile or leap-year day, cannot, in the natural course of events, have been due for insertion and therefore cannot have been legitimately inserted in the Roman calendar in this particular period of 458 days without creating a gap for which there was no fill of time-material at the disposal of the Jews. On the other hand, there was, in precisely the same manner, no opening for a "Badhu" or extra-intercalary day in the Jewish calendar, either between the Day of Atonement and the following Passover Feast or between the Paschal Feast and the Feast of Dedication, which could have been matched by the Romans in their Julianized calendar. For, to inject or forcibly insert a supernumerary day between the afore-mentioned correspondents of the twenty-fourth of September, the twenty-fifth of March and the twenty-fifth of December would be equivalent to blasting asunder the natural order of numbers, and opening a fissure in the normal continuity of time, for which neither the Jewish high-priest nor the Roman pontifex maximus had an adequate composition. We are therefore obliged to accept this cordon of chronological outposts as a single fortification of great strength, a conjunction or knot of military lines so solidly linked and welded together that it stands out unique and unduplicated in the sphere of sacred chronology. In the range of 238 years, which so far have come within the scope of our scrutiny, there is not another conjunction of calendric date like this, involving, as it does, the intercalation of an erratic month of twenty-nine days, yet excluding the interpolation of a single additional day in any part or section of this period. In view, then, of the fact that such a conjunction can occur, and actually did occur, only once in the life-time of the Era, we might conclude without further ado that it occurred either in the third or the fifth year of the second Metonic cycle of the Calippic Period then current. In other words, if this extraordinary conjunction of dates occurred either in the first or second major zone of intercalation, we might jump to the conclusion at once that the birth of Jesus occurred either in 5 B. C. or in 3 B. C., seeing that those are the years so distinguished and signalized by the insertion of the

required embolismic months. But, however distinctly and definitely the only two possibilities of selection may be thus pointed out (all others but the eighth, 1 A. D., being precluded by their lack of intercalary space), we shall not presume to draw that conclusion until we have pondered all the arguments advanced by our predecessors for the determination of the date of Christmas.

The date for the deduction as to the year of the nativity of Jesus Christ are fulsomely advanced and discussed in such erudite volumes as Andrews' *Life of Our Lord* (*Chron. Essay*, pp. 1-12); Robertson's *Harmony of the Gospels*, pp. 262-267; Didon's *Jesus Christ*, Vol. II, pp. 393-408; Farrar's *Life of Christ*, (Excursus I, pp. 735-736); etcetera, etcetera. They may be briefly re-stated as follows:—

1. Jesus was born before the death of Herod the Great.
2. Jesus was born some time before the appearance of the Star which brought on the visit of the Magi.
3. Jesus was born some two years [or months] before the slaughter of the Infants or some three years before His return from Egypt.
4. Jesus was born "about thirty years" before the commencement of His own ministry and the mission of John the Baptist.
5. Jesus was born at least thirty years before the forty-sixth year of building operations about the Temple.
6. Jesus was born in the twelfth or fourteenth year of the age of his mother.
7. Jesus was born in the third or fifth year of a Sabbatic week of years.
8. Jesus was born shortly after the promulgation of the decree of Caesar Augustus ordering a general registration with a view to regular taxation.

If there are still other lines of argument brought forward, such as that from the pedigree or family tree of Jesus, these may be safely set aside for minor consideration, or may be ignored altogether. Those which we have propounded above should be amply sufficient to establish the date of Christmas and to substantiate in general the claim for correctness and authenticity in behalf of the Calendar as reconstructed in this essay.

1. THE LUNAR ECLIPSE BEFORE HEROD'S DEATH AND HEROD'S DEATH THEREAFTER

1. The first and foremost point of departure from which the Nativity of Jesus is generally computed is the date of Herod's death and the lunar eclipse before it. Almost uniformly, and we may say, almost universally, this calculation is accompanied with such expressions as "positively" and "with absolute certainty" when referring to the phenomena which aid and assist in fixing the date of Herod's death. It is therefore all the more

imperative that we should reach out in all directions and to any degree of distance for data admittedly fixed and settled, in order that we may get this epochal time-determination right and unquestionably certified.

Now it is a matter of the utmost certainty that there was such an eclipse as that of March twelfth to thirteenth, in the year J. P. 4710 or 4 B. C., and that this obscuration of the moon did happen before the decease of Herod the Great. The fact is affirmed and vouched for by Clinton, *Fasti Hellenici*, Vol. III, p. 256; Ideler, *Handbuch der Chronologie*, II, 391; Jarvis, *Chronological Introduction*, pp. 357-359; Page, *New Light from Old Eclipses*, I, 80; Totten, *Our Race*, XIV, 84; etcetera, etcetera. "It has been ascertained by astronomical calculation," says Andrews, *Life of Our Lord*, p. 1, and Didon, *Jesus Christ*, Vol. II, p. 395, adds: "Astronomical calculations established in the most absolute manner (Ideler, *Handbuch der Chronologie*) that in fact an eclipse visible at Jerusalem took place between the twelfth and thirteenth of March, from eight minutes past one to twelve minutes past four." But what of it?

"It has become customary," says the author of *Studies in the Scriptures* (*The Time is at Hand*, Series II, pp. 55-56), "among scholars to concede that our commonly accepted A. D. is incorrect to the amount of four years—that our Lord was born four years previous to the year designated A. D. 1, i. e. in the year B. C. 4 [or rather B. C. 5]."—And we might rest content with the subversion of this statement if his exception to its truth were altogether well taken. He continues to say: "Among other supposed proofs that B. C. 4 was the proper date [of Herod's death], was an eclipse of the moon, said by Josephus to have occurred a short time before the death of Herod. All that is known of that eclipse is as follows: Herod had placed a large, golden eagle over the gate of the Temple. Two notable Jews named Matthias and Judas, persuaded some young men to pull it down. They did so, were arrested and executed. To make the matter clear, Josephus relates that there was at that time another Matthias, a high-priest, who was not concerned in the sedition. He then adds: "But Herod deprived this Matthias of his high-priesthood, and burnt the other Matthias, who had raised the sedition, with his companions, alive, and that very night there was an eclipse of the moon." This is recorded as one of the last prominent acts of Herod, and is given a date which might correspond with B. C. 4 by Josephus, who marks the date by the eclipse mentioned.

"But since at times as many as four eclipses of the moon occur in one year, it is evident that except under very peculiar circumstances the record of such an occurrence proves nothing.

Where the time of the night, the time of the year and the amount of obscuration are all given, as has been done in several instances, the record is of great value in fixing dates; but in the case under consideration there is nothing of the kind; hence absolutely nothing is proved by the record, so far as chronology is concerned. Josephus does mention a fast, as having been kept before the event, but what fast, or how long before, is not stated.

"As it happens, there was only one eclipse of the moon in B. C. 4, while in B. C. 1 there were three. The eclipse of B. C. 4 was only partial (six digits, or *only one-half of the moon* being obscured), while all three in B. C. 1 were total eclipses—the entire moon was obscured, and of course for a longer time, causing the event to be much more noticeable. Hence if the eclipse theory has any weight it certainly is not in favor of the earlier date, B. C. 4.

"Perhaps," asks Father Trench (*Birth and Boyhood of Jesus Christ*, p. 179), "there was something remarkable about this eclipse of March 13, 4 B. C.? On the contrary, it was not even a total eclipse, but was *only one third of the moon's disc* ($4\frac{1}{4}$ digits). See Pingre's *List of Eclipses*—a work universally accepted as accurate and crowned by the French Academy. Not only so: not even the most superstitious of the populace could have connected it with the death of the two Rabbis, for it would scarcely *have been seen by any one at Jerusalem*, for it occurred there at 3:10 A. M. centrally."

Why, then, should this be the eclipse of the moon alluded to by Josephus (*Antiq. B. XVII. C. VI. §4*)? Were there no other eclipses in this ten-year period ascribed by one writer or another to the death of Herod? Aye, indeed: there were plenty of them that *may not*, and there was one which *must*, be identified with the phenomenon of Josephus. There was, according to Trench (*Birth and Boyhood*, p. 179), an abnormal obscuration of the lesser light in 3 B. C., "on the night of February second to third; although no natural or normal eclipse is given for this year by any of the lists of scientists, such as Pingre, Ideler, Lindsay, Stockis, or any other. And since we are unable to calculate an abnormal phenomenon according to an abnormal working of an unknown law, we may as well abandon (with the best grace possible) all attempts at utilizing the uncertain issues of an unknown quantity. There was, however, another darkening of the moon in that vicinity, a normal eclipse of the moon in 2 B. C., one in accordance with the ordinary laws of nature, which, falling on the twentieth of January, as calculated by Scaliger, has been pitched upon by a host of followers as the true obscuration of the satellite intended by Josephus. But this case of darkening of the moon's disk can hardly be considered appropriate. While it was

believed visible at Jerusalem by Scaliger himself according to the old tables, its visibility is point-blank denied by Father Trench and others.

On the other hand, it is admitted by all that, in the following year, 1 B. C., there were three overshadowings of the queen of night, all total, and all visible in that part of the world in which we are now interested. "It appears," says Geikie (*Life*, I, p. 142), "that there was an eclipse of the moon on the night of January the tenth, in the year 753 [Varronian A. U. C.=1 B. C.] and it is urged [for instance, by Caspari, *Chron. Geog. Einleitung*, p. 28] that this suits the facts much better." It is thus described and accredited by Prof. Totten, *Our Race*, No. 14, p. 128: "Total eclipse of the moon January ninth to tenth (old style), 1 B.C. Central at Jerusalem, *remarkable* for its duration. This eclipse was calculated by William Cunningham, Esq., prophetic and chronological writer, who died in 1849 A. D. It was verified by Prof. T. Henderson, Royal Observatory, Edinburgh, in 1835, who testified as follows: "It appears from the calculation made here (which I have examined) that the moon was totally and centrally eclipsed on January ninth (old style) of the year 1 B. C., according to the chronologists, or of the year 0, according to the astronomical mode of reckoning, and that the times by the meridian of Greenwich were: Beginning of eclipse 8h. 5m.; of total darkness 9h. 54m.; middle, 10h. 44m.; end of total darkness, 11h. 34m.; end of eclipse, 12h. 31m. Signed, T. Henderson."

Now, what are the facts with which the all-evening eclipse of January ninth to tenth, 1 B. C., is so much more compatible than that early-morning obscuration of March thirteenth, 4 B. C.? To start with, the later occurrence comports better with the year of Herod's age at the time of his death than the earlier event. Being remarkably young, only fifteen years old [like the grandsons of Augustus] at the time of his appointment to the governorship of Galilee in 47-46 B. C., and only twenty five (rather than thirty-five) at the time of his marriage with Mariamne in 36 B. C., he was born in 61 B. C. as the second son of Antipater, a couple of years after the capture of Jerusalem by Pompey in 63 B. C., and therefore must have died at the age of SIXTY (SIXTY, not SEVENTY) in the year 1 B. C. Since he had invested the City exactly twenty-seven years after the occupation by Pompey in 63 B. C., and, from the day of inauguration on December eighth, 36 B. C., had reigned thirty-four years as actual ruler of the land, he must have died, to say the least, at the extreme end of 2 B. C., if not a little later, in 1 B. C. And whereas the naval encounter at Actium was fought in the seventh year of his reign, that is to say in 30-29 B. C., and that was 267 years before Censorinus wrote in 238 A. D., and whereas, ten years later, after

Caesar's coming into Syria, the plan for the building of the Temple was first conceived, which he began to execute in the spring of his eighteenth year, 18 B. C., completing and dedicating the Holy of Holies on December eighth, 17 B. C.; and whereas, finally, this beginning of building the Temple was made forty-six years before the fifteenth year of Tiberius Caesar in 28-29 A. D., when the Lord of the Temple challenged His foes to face a rebuilding in three days (*John* II. 19. 20), it follows from these data that the regnal years of Herod the Great, if they were indeed thirty-four and no more, came to a close in the year 2 B. C., but of right ought to be augmented to thirty-five. The aberration of Josephus of ascribing to Herod the Great only thirty-four years instead of thirty-five, and to Archelaus, his son, *ten* years instead of nine, may be noticed easily by a cursory perusal of the two accounts of the dream of Archelaus recorded by Josephus, first in his book of the *Wars* (B. V. C. VIII. §3), and then in his book of *Antiquities* (B. XVII. C. XIII. §2). In the latter the historian tells us that the doomed despot "saws ears of corn, in number *ten*, full of wheat, perfectly ripe," but in the former he affirms: "He seemed to see NINE ears of corn, full and large, but devoured by oxen." Now, if the ears of corn, being *ten*, determined the like number of years," all perfect and completely rounded out, it is obvious that he should have accounted it the *eleventh* year which evidenced the downfall of Archelaus. But since, by his own account, only NINE years were full and the *tenth* was fractional, and since, in the sober annals of history, only *nine* years are accredited to Archelaus by Sulpitius Severus, Eusebius, and Epiphanius (see Jarvis' *Chron. Intr.* pp. 383, 399 and 402), it follows that a fraction of a year remains unaccounted for between the reigns of father and son, which of right ought to go to Herod, the father, as the thirty-fifth year of his reign. A brief computation will prove this. Since the end of his reign cannot be moved, forward or back, seeing it terminated simultaneously with "the taxings, which were made in the thirty-seventh year of Caesar's victory over Antony at Actium" (Jos., *Antiq.* B. XVIII. C. II. §1), and this battle was fought on the second of September, 30 B. C., 267 years before the heyday of Censorinus, it requires no gift of augury to divine that, in the tenth current year before the banishment of Archelaus, there must have been a fragment of an interregnum or the fraction of a thirty-fifth year of Herod, the father, amounting to almost two months (from December eighth 2 B. C., to January twenty-sixth, 1 B. C., or upwards of seven and a half months (if reckoned from May twenty-sixth, 2 B. C., to January twenty-sixth, 1 B. C.), when the old lion was still very much alive and seeking whom he might devour. It must stand apparent, too, that, since the regnal years of Archelaus did not in any case begin

before the Passover or the New Year's day of the sacred Jewish year, in this case the year Sel. 312, has nine full years of mismanagement passed conterminously with the spring-to-spring years of the Chronological Scale, from the Passover, or rather Pentecost, of Sel. 312 or A. U. C. 753 [=1 B. C.] to the Passover or Pentecost of Sel. 321 or A. U. C. 762 [=9 A. D.], the fraction of his tenth year (if any) was the brief interval between the Passover and Pentecost.

With this natural and true-to-life adjustment of the regnal years of Herod and Archelaus before us, it is easy to see how the closing incidents and episodes of Herod's life occurred. On the eve of the Feast of Lights, which Judas Maccabeus had dedicated to the reconsecration of the Temple and the cleansing of its worship from heathen elements, Herod had secularized and desecrated the house of God by surmounting the great gate of the Temple with an emblem, the golden image of an eagle. He had defied the sense of propriety of a fanatically religious people as well as defiled the sanctuary of the living God in rendering this act of homage to the sovereignty of the Roman emperor and the supreme powers of the Roman senate and people. But he had yielded this mark of submission with all the more alacrity because the imperial representative of Roman power in Syria, Publius Quintilius Varus, the governor of the province and now assessor to Herod, was in the City, and with him the invincible legions which were able and willing to enforce the demands of the emperor and people of Rome. It had been the periodical return of the quinquennial census in all the provinces, and it had been the intention of the emperor to treat Herod, too, as a subject rather than as an associate. But, though a reconciliation had been effected, the need of currying the favor of a foreign ruler and contributing gifts and presents instead of tribute and taxes, had by no means passed away. The open acknowledgment of servility, in defiance of public sentiment and in violation of the Temple's sanctity, deeply incensed the theocratic feelings of the people. Had the sceptre altogether departed from Judah and passed over to the people, furious and fast as the eagle flieth? No, not yet, if the brave of the land rose up against it. Accordingly, a number of young men, instigated by two of the leading Rabbis of Jerusalem, determined to contest the obsequious action of their declining king, with the result that no fewer than forty of the young men were sent in fetters to Jericho, and that Judas and Matthias, the reactionary interpreters of the law, were doomed to be burnt alive. "And that very night," says Josephus, "there was an eclipse of the moon."

What a fitting phenomenon of nature to emphasize the tragedy of the scene when the champions of religious orthodoxy

and political independence were thus flagrantly sacrificed as a burnt-offering to foreign interference by one professedly of their race and religion. But however that may be, let us now ask and answer the question, How does the process of execution of sentence upon these Jewish protestants comport with the actual conditions of the case? Is it to be supposed that the procedure would be slow or speedy? Would the execution of Herod's ferocious will be put off from week to week, for months and months, or would it be enforced, either not postponed at all, or no more than absolutely unavoidable? As a matter of fact, if it all happened in 4 B. C., two and a half months after the high-handed proceedings of the young men at the time of the nearest feast, that of Dedication, does the execution seem in keeping with the high spirit of Herod? Or would it seem more in accord if it followed swiftly with the speed of an infuriated monster? What do you say? Is not the brief spasm of fifteen days from December twenty-first, 2 B. C., to January ninth, 1 B. C., incomparably more compatible with the conditions of the case than a long-drawn-out suspense of seventy-five days from December twenty-fifth, 5 B. C., till the night of March twelfth to thirteenth, 4 B. C.?

In appreciation of the meritorious work of E. Greswell in the premises, we shall follow the lead of Wm. M. Page, in *New Light from Old Eclipses* (pp. 85-87), and copy from Greswell's *Harmony of the Gospels* (Vol. I, pp. 302-305) a somewhat long but correspondingly strong passage regarding the chronological fill-in of the gap between the eclipse preceding Herod's death and the accession of his son Archelaus.

"If there was an eclipse of the moon at the full, March 13, U. C. 750 [B. C. 4], it must have happened exactly one lunar month before the Jewish Passover, the time of which would be necessarily (and in fact is calculated accordingly to have been) the time when the moon was next at the full; that is, not later than April eleventh, in the same year. All the events, then, recorded by Josephus between the eclipse and the ensuing Passover, must have come to pass within the space of one month at the utmost; but the events between the eclipse and the death of Herod, which happened after the one and before the other, must be comprehended in a much shorter time.

"For after the death of Herod, we have mention made in Josephus, *first*, of the seven days' mourning for his death, before Archelaus presented himself in the temple, as completely over; *second*, of that presentation, which could not be earlier than the day after the close of that period of mourning; *third*, of the commencement of the disturbances in the temple on the evening of that day; *fourth*, after these had continued for some time, of the influx of the people from the country against the feast of the

Passover; (an influx which could not begin later than four days before the Passover, and might begin earlier; for there is an instance on record, when it had begun and was going on before the eighth of Nisan;) and *lastly*, of the dispersion of the people by violence on the day of the Passover itself. The death of Herod, then, could not have happened less than fourteen days before April tenth [$14 - 10 = 4$; March $31 - 4 =$ twenty-seventh of March]; nor, consequently, more than fourteen days after March thirteenth [Mar. $13 + 14 = 27^{\text{th}}$ of Mar.]

"All the events between the eclipse and the death of Herod, on this principle, must be comprehended within *fourteen* days at the utmost. The death of Antipater is one of these events; and Antipater was put to death FIVE days before the death of Herod. The events, then, between the eclipse and the death of Antipater, must have all come to pass within the space of NINE days at the utmost. Now what were these events? *First*, the progressive advancement of Herod's disorder, which was slow and lingering, and began to grow ["greatly"] worse only after the eclipse itself, until it arrived at its crisis; *second*, a journey from Jericho to the warm baths at Callirhoe, in the vicinity of the lake Asphaltitis, when the disease was at its highest; the time taken up by his continuance there, trying the effect of the waters; and the return to Jericho; *third*, after this return the transmission of orders, throughout all his dominions, to the principal men everywhere, to repair to Jericho; and in obedience to these orders, their assembling in Jericho accordingly; *fourth*, the arrival of Augustus' answer from Rome, and the interval between that arrival and the death of Antipater, which was the next event.

"It is not possible that all these particulars could have come to pass, in the order here recited, between the thirteenth and twenty-seventh of March; which yet they must have done, if the eclipse on the thirteenth of March [4 B. C.] was the eclipse which immediately preceded the death of Herod."

Nor is this all. If we may be permitted to anticipate a glance at the situation in the light of the coming calendar calculation, and take a look at the things that then happened as they were timed and spaced in the almanac of the year, we shall see the incongruity and incompatibility of every false hypothesis instantly in all its abhorrent untowardness. And if, in addition to the calendric arrangements of the times, we take into account the predominant state of mind of the heavily-oppressed people, we shall discover a conflict and antagonism between this prevailing state of affairs and the reported actions of Herod which positively disprove the claim of modern chronologists that Herod committed his crimes in the face of popular opposition and the unsuitableness of the times.

As every observing reader knows, if there was one form of religious fanaticism more than any other with which the Jewish people of that age was affected (or shall we say afflicted?), that was fomented and fired by their overzealous leaders and teachers to the point of frenzy, and that flared up and burst into lambent flame whenever the spark of friction or the torch of incendiarism provoked its fury, it was the incurable mania of sabbatarianism. Yet it was this very explosive passion, this hysteria for the over-literal observance of the seventh day, that Herod must be supposed to have flouted and slapped in the face in bringing to execution "the most respected and distinguished interpreters of the law who had denounced the king's recent desecration of the temple." With this understanding of the psychosis of the priests and people, imagine, if you can, on the largely accepted theory that Herod died 4 B. C., how it was possible for a Jew, even a proselyte of a long-converted Idumean family, to appoint for the execution of the extremists the day that the twelfth of March was in the Jewish calendar and ritual. If you will, take the trouble to calculate this day (which preceded the early morning eclipse of the moon on the thirteenth of March), or else consult the calendar as it is worked out on pages 382 and 386 of this volume; you will see that the day of execution, the twelfth of March, was:

1. *First*, a seventh day of the week, a Sabbath-day or a holiday dedicated religiously to rest and abstention from labor, a sanctified day whose super-sanctimonious observance more than any other cause or all other causes combined proved the undoing of the Jews as a nation among nations.

2. *Second*, it was the feast of Esther, of Purim celebrity—a holiday of which the special significance lay in the abasement of the heathen and the consequent exaltation of the holy people.

3. And *third*, it was the anniversary of the day of Nicanor, another nationalistic holiday, the day so gloriously signalized by the victory of Judas Maccabeus that it was forever afterward observed as a day of liberation from foreign overlordship, and as a day of promise of Jewish ascendancy over Gentiles everywhere.

It was, therefore, a doubly devoted and trebly consecrated holiday that must be supposed to have been defiled and vilely desecrated by the unspeakably humiliating spectacle of a public and quasi-pagan execution of two representative men of God's holy people. Can it be conceived that a wily old diplomat like Herod the Great could thus have trampled under foot the most hallowed historical associations and nationally observed solemnities of this thrice holy day? If this vile and wilful outrage of public sentiment was committed on this twelfth day of March, 4 B. C., where was the tact, where was the diplomacy, where

was the common sense, of the old king? Can it be imagined that this old demagogue, far in advance of Nero's time, should have devised and intended the public burning of the rabbinical ring-leaders to be a spectacular exhibition like the cremation of Christian martyrs? Did he out-Nero Nero's art of amusing while abusing the people? Did he invent this new mode of wreaking vengeance by a method as insultingly entertaining as it was insolently deterrent? We cannot believe it; for though we admit that Herod was a typical Oriental despot, a demon rather than a man indeed, he was not yet gone so far out of his senses that he could not reason: "Not on the feast day, lest there be an uproar among the people" (Mark XIV. 2). For, after all, they were his people, as the Romans were Nero's people, and the temple was Herod's temple more individually than the circus was Nero's. And had he not built the temple to conciliate the people as well as to perpetuate the law of Moses? We cannot, therefore, assume for a moment that Herod deliberately selected such a day for the punishment of the priests or sophists as the thirteenth of Adar, or the twelfth of March, 4 B. C., really was. Being the 58520th day of the Jewish-Roman Era, it was the 8360th seventh day or Sabbath of the period, or, according to the Julian Calendar, the last day of the week, as the dominical letter B will show the twelfth of March, 4 B. C., to have been. It is too hard to believe that Herod should have insulted the people and profaned the Sabbath day by burning the recalcitrant teachers alive on the day before the eclipse, which is supposed to prove "with absolute certainty" that Herod died shortly after this obscuration in 4 B. C.

Nor is it much less unlikely that Herod should have perpetrated the alleged blunder in statemanship on the twentieth of January, 2 B. C., as surmised by Scaliger, Greswell, and others, although this latter date is relieved of the increment of patriotic and nationalistic associations attributed to the former. Nevertheless this date, too, is possessed of the Sabbatic character, and, as a matter of simple consequence, the same charges of improbability inveigh against this as well as against the other date. Being, as a little figuring will show, the 59199th day of the Asmonean-Herodian Era, it was the 8457th seventh day or Sabbath of the Era, and being, in the terms of the Jewish Calendar, the thirteenth of Shebat or Peritius, Sel. 311, it coincided with the twentieth day of J. P. 4712 or 2 B. C., which the dominical letters GF demonstrate to have been a Saturday. All arguments and considerations, therefore, which may be brought against the assumption of a Sabbath day-session of the court and of a Sabbath-day-execution of their sentence may be brought with equal effectiveness against the twentieth of January, 2 B. C., as against the

twelfth of March, 4 B. C. For, while it may be admitted that due to its earlier occurrences, the twentieth of January would have suited the general exigencies of the case a great deal better than the twelfth of March, it must nevertheless be insisted that it still, not only failed to meet the demands for a clear-clean-cut, whole-orbed obscuration of the moon, but that its selection (if selection it was) was an offence against a most furiously fostered superstition of their faith. Its probability of being the date of Herod's execution of his critics is therefore nil.

How different, on the other hand, are the concomitant features of the ninth of January, 1 B. C. A whole-orbed overshadowing of the moon, and that in the early hours of darkness! In the evening of a day customarily set aside for the convening of the court and for the execution of its sentences. A day not too remote from the Passover succeeding the decease of Herod, the donor of the golden eagle, and not too distant from the day of its dedication and destruction! A day imparting the air of judicial promptness, aye, almost of mob violence and lynch-law retribution, in the punishment of the iconoclasts, and, on the other hand, precluding the impression of hurriedness in laying away the body of the departed ruler! In short, the ninth of January, 1 B. C., equivalent to the thirteenth of Tebeth or Audenaus, is a day of such impressive naturalness and compelling plausibility that, if the three suggested eclipse dates discussed above were propounded independently of other considerations, that is to say, in the naked aspect of their calendric qualifications, there would be no hesitation as to which of these three dates would be chosen as the one meant by the historian. Being the 59554th day of the Jewish-Roman or Asmonean-Herodian Era, and, when reduced to weeks, the fifth day or Thursday (see Calendar E), the ninth of January, 1 B. C., was exactly what historical conditions require it to be as the appropriate date for the execution of the zealots which shortly preceded the death of Herod the Great.

But more than this. If, instead of the early-morning eclipse of March thirteenth, 4 B. C., which would hardly have been noticed by anyone, except the all-night revelers of the Purim festival, we accept the all-evening obscuration of January ninth, 1 B. C., an honest-to-goodness eclipse, which was remarkable both for its intensity and for the extent of its umbration as the eclipse certainly meant by Josephus; and if, moreover, we adopt the feast-day of Shebat first or second, suggested by the Talmud (*Taanith*, XI), as the probable date of Herod's death, we should obtain at least sixty days more latitude for the disposition of events after his decease than we could have in the former case. In particular, we could make ample allowance for the most

pompous and pretentious funeral demonstration since patriarchal times, whether such be really or apparently only required by the account of Josephus. "In his description of the ceremonies," says Dr. Jarvis (*Chron. Intro.*, p. 360), "Josephus states in one place (*Antiq.*, B. XVII. C. 8, §3) that the procession went towards Herodium *eight stadia*; for there, according to his own command, he was [to be] buried," whereas in another he says (*Wars*, B. I. C. 33, §9), describing the same procession, 'the body was carried *two hundred stadia* to Herodium, where, according to his commands, he was buried.' Whiston attempts to reconcile the two statements, by supposing that they went eight stadia, or furlongs, a day, and consequently that the funeral took up no less than twenty-five days. But this supposition appears to be incredible."

It is only natural, and to be expected, that, in case of inability to do otherwise, an advocate of the March thirteenth eclipse should essay to explain away the fact of such a funeral demonstration of thirty days or more. Yet it must have been a fact (just as in the case of Jacob, the patriarch, Gen. L. 3) that there was such a ceremonious march of twenty-five days, if it is a fact expressly stated by Josephus (as Wm. M. Page puts it in *New Light* etc., p. 87), "that Archelaus *continued* the term of mourning for *seven* days, thus implying that these *twenty-five* days must be considered as ending before the *seven* days' mourning [at the tomb] began." Nor is it unmeet that the time and distance involved should be divided up in the manner indicated. The eminent Talmudic authority on ceremonial matters, Reland, observes that "*two hundred and ten stadia* [or twenty-five miles] were considered an ordinary day's journey; and *eight stadia*, or two thousand cubits [that is to say, about seven and a half miles] were regarded a fair Sabbath-day's journey. How appropriate, then, that the funeral procession of the great king should be accomplished in solemn Sabbath-day stages, and not executed in one rapid military march! Is it not the slow and stately motion that creates the impression of solemnity and sanctity, and that causes the beholder to stand still in mute submission to the pall of death? If, then, we accept as supremely, yes, as superbly probable that Herod died, as the Talmud says he did, on the first of Shebat, or January twenty-fifth, 1 B. C., and that the obsequies of Herod, like those of the patriarch of old, over a period of thirty days, it follows that the entire month of Shebat was given over to the public demonstration of grief for the death of Herod. As the children of Israel wept and mourned for Aaron and Moses thirty days, so the days of weeping and mourning for Herod were not ended until the thirty days of Shebat were over. Aye, even as, in our own time and clime, the

people of America demonstrate their feelings of grief and loss on the death of a president by displaying their flag at half-mast for thirty days, so, in conformity with the most famous and pretentious funerals of Israel's history, the people of Judea showed forth their respect for the departed ruler by ceremonies and manifestations of sorrow for a period of mourning commensurate with the dignity of a patriarch and a prince of Israel. For, was he not after all, a great man, and the builder of Israel's glory? Then, when the first two weeks of Adar had passed over the land, resuscitating the forces of nature and reviving the spirits of men; when the feasts of Esther and Mordecai had spurred up the people to a realization of their former greatness and the depth of their present humiliation; and when the spirit of the approaching Passover—their feast day of deliverance and independence—seemed to point out a way of escape from their miseries, then of course, a multitude of dissensions and disturbances arose to challenge the succession of Archelaus. Bloodshed and murder, massacres en gross and crucifixions en masse (if the figures of Josephus are not grossly exaggerated) indelibly stained the Passover to Pentecost season of this year as one of the reddest in the annals of anarchy and revolution. Not until Varus, the governor of Syria, had quelled the revolt with an iron hand, while Archelaus was still at Rome awaiting the pleasure of Caesar Augustus, did the country subside into a semblance of peace.

Since Caesar Augustus, according to Josephus (*Antiq. B. XVII. C. IX. §5*), "summoned his *friends* together, to know their opinions [on the claim of Archelaus to the throne of Judea], and *with them* CAIUS, the son of Agrippa and of Julia his daughter, whom he had adopted, and took him, and made him sit first of all," some time after Pentecost, which, in 1 B. C., fell on May twenty-eighth, it follows that the expedition of Caius into the East cannot have taken place prior to this date, say in 4 B. C., 3 B. C. or 2 B. C., but must have been undertaken in the course of the following year, that year which is erroneously accounted the first of the Christian Era. (J. P. 4714). For that Caius was absent from Rome in that year is "clearly evinced", as Dr. Jarvis has it (*Chron. Intro.*, p. 220), "by the fragment of a letter preserved by Aulus Gellius, written by Augustus to Caius, at the beginning of his *sixty-fourth* year: 'On days like the present, my eyes look around for my Caius. Wherever thou hast been on this day, I hope thou hast celebrated joyfully and in good health my *sixty-fourth* birthday; for I have escaped, as you see, the common climacteric, of all old men—my *sixty-third* year,' etcetera." That *sixty-third* year of Augustus elapsed, and his *sixty-fourth* began, in J. P. 4713 or 1 B. C. Having been born, as

his biographers tell us, on the twenty-third of September of the year when M. Tullius Cicero and M. Antonius were consuls, that is to say, in J. P. 4651 or 63 B. C., the *sixty-third* anniversary of that day, after sixty-three complete and perfect years, would fall into the first year A. D., or J. P. 4714. Consequently, if it was in the year immediately preceding the expedition of Caius to Armenia and Egypt that Archelaus appeared before him and his fellow-councillors to Augustus to be confirmed by him in the kingdom of his father, we have herein only another proof that the death of Herod the Great occurred in the beginning of 1 B. C. (not in 2 B. C., 3 B. C., or even 4 B. C.), and that, by way of inexorable consequence, the nativity of Jesus Christ cannot have fallen below that level. It is, therefore, not worth while to take up such contentions as those of Lydiat, Paul of Middleburg, Herwart, and Norisius, that Jesus was born respectively in 3 A. D., 2 A. D., or 1 A. D. Besides, even if we did consider their arguments in favor of their conclusions, the Jewish calendar for the years Sel. 313, 314 and 315 would show that the twenty-fifth of Casleu, the birthday of Jesus, would fall respectively in 1 A. D. on December thirtieth, a Wednesday; in 2 A. D. on December nineteenth, a Sunday, and in 3 A. D. on December seventh, a Thursday: not one on a Sabbath or Saturn's day, as it must do to conform to the conditions of history.

So far, then, we have proven, and endeavored to prove, only this, that the nativity of Jesus Christ cannot by any possibility be placed below the chronological level of Herod's death, i.e. the twenty-fifth of January, 1 B. C., although such high authorities as the *Chronicon Alexandrinum*, Dionysius Exiguus, Dr. Martin Luther, Labbaeus, Pearson, Hug, Shimeall, Thomas, and others, have done their best, or rather their worst, to fix the birth of Jesus to the end of 1 B. C. So, not to lose any more time on such futile efforts and baseless illusions, as herewith indicated, let us now turn back to the lines of argument leading to the narrowing down of the margin surrounding the true date of Christmas. To this end we shall take up the next chronological datum which appears to be of a scientific astronomical character, the appearance of the star of the Magi.

2. THE STAR OF THE INFANT MESSIAH, THE MAGI, AND THE MASSACRE OF THE INNOCENTS AT BETHLEHEM

The second factor supposedly available for a scientific computation of the Nativity is considered preeminently eligible for that purpose because it seems capable of astronomic determina-

tion, like the occurrence of an eclipse in the dying days of Herod the Great. The mention of a "star" in the East and "standing" over Bethlehem seems to suggest that this second appeal to astronomy might reveal the exact date when the prospective King of the Jews was born. Like the celebrated horoscopes of the Roman emperors, the precise description of the time of His birth is supposed to have been written and, as it were, enregistered in the heavens, so that, by reversing the cycles of the sun, moon, and stars, it is possible to discover that section of the scroll of time which bears indelibly engraved the record of His birth, to be read in silent adoration or to be rewritten in terrestrial manuscript. The celestial record of this great event is sought by some in the configuration of certain planets and major constellations, by others in the transient appearance of certain evanescent stars, comets, meteors, and minor heavenly bodies. By some this horoscopic registration is sought chiefly in advance or ahead of the times, by others in the sequel or aftermath. It is therefore advisable to divide the evidence accruing from the astrological and quasi-astronomical sources submitted into two grand divisions—the antecedent and the subsequent—the former relating to planetary configurations and conjunctions, the latter to other sidereal phenomena.

One of the conditions to be met in the identification of the "star" of the Infant Messiah is the time-limitation of its appearance. On the ulterior side of the Nativity the star is said to have been seen by the Magi "in the East" or "at its rising," signifying, at all events, that it preceded and antedated the birth of Christ, like a portent or token of His coming. On the cisterior side, it is said to have "gone before them until it came and stood over the place where the young child was." No time is specifically mentioned, but it may be inferred from the mention of a dream that they spent only the night in the environs of Bethlehem and then went back to their own country another way. How long after the birth of Christ the visit of the Wise Men occurred we are left to infer from the context. There are several marks of time here which must be scrupulously observed, even as they were kept by such strict observers of the law as Mary and Joseph. The first is the completion of *eight days* when He was circumcised and given the name Jesus; the second the fulfillment of *forty days*, when the mother's purification was accomplished, and the presentation of her first-born was complied with. In neither of these short periods may we place the Wise Men's visit. The situation forbids it. The atmosphere of the place was charged with danger. The psychology of both king and people foreboded evil. Since, then, the circumcision and the presentation in the Temple (both requiring a certain amount of ostentation) could not have been "staged", as

it were, in the limelight of adverse publicity and in defiance of what a jealous ruler and a worried population might do, the appearance of the Magi on the scene cannot be placed within the scope of the *forty days*, but must be located beyond the legally prescribed limits; yet not too far beyond, since the news of Christ's nativity must appear surprisingly fresh and vital at the time of their arrival; not stale or belated, but recent, up-to-the-minute, almost simultaneous with the Birth itself—"just happened," as portrayed by artists and pictured in popular fancy. Hence it is that two divers interpretations of the time-determination confront us.

The first interpretation is based on the literal translation of the text: "Then Herod, when he saw that he was mocked of the Wise Men, was exceeding wroth; and sent forth, and slew all the children that were in Bethlehem, and in all the coasts thereof, *from two years old and under*, according to the time which he had diligently inquired of the wise men," (Matt. II. 16). According to this most commonly accepted version the term "years" is taken to mean "*two twelvemonths*," and interpreted to imply anything from "entering upon the second year" to "two perfect and complete years." We shall apply both interpretations to the phenomena and facts presented, and judge accordingly which of the two deserves an application to the case.

A great deal of time and trouble necessarily expended upon research work would have been spared us if the Biblical account of this heavenly apparition had been couched in the technical terms of the mathematical sciences. But the star is not even named, either in this gospel narrative or in any other part of Holy Writ, nor yet in any apocryphal or apocalyptic literature. Neither is the "star" described minutely enough to insure a successful identification or to preclude a mistaken identity. (Prof. Oswald Gerhardt of Berlin, for instance, would identify it with "Chiun" (Amos 5:26) and "Remphan" (Acts 7:43), and altogether with the planet Saturn). But, instead of being reported in the style and phraseology of astronomy, it is mentioned rather in the vein of the marvellous, the fabulous, the ultra-phenomenal. Notwithstanding these enormous handicaps, a multitude of attempts have been made to associate this wonderful phenomenon of Bethlehem with the every-day ordinary "stars in their courses." It has been successively associated with planets and planetary conjunctions, constellations, comets, meteors, periodical evanescent, and variable stars, either in warm conjunction with others or in frigid isolation by itself. Most, or rather *all* of these attempts are abortive. Nor can any attempt to divest this "star" of its supernatural, miraculous character be otherwise than a failure, since it is not supposed to be a "common"

thing. Nevertheless we shall review a few of the most conspicuous and illustrious; say, one of the class of constellations produced by a conjunction of planets, and one of the class of isolated luminaries distinguished by its sudden appearance in the skies as a new and hitherto unknown "star."

The hypothesis usually put forth in the first place is the theory of the great German astronomer, Johannes Kepler, who inaugurated the calculations leading to the discovery that, in the years 7 and 6 B. C. or in the Roman years 747 and 748 (according to Varro), there had been a constellation of major planets, Jupiter, Saturn, and Mars, so blindingly brilliant and so closely conjoined and compacted together, as to appear to the casual observer as a single, composite "star." The fact of this composition has been recalculated by Ideler, Encke, Pritchard, and others, and was verified by the Astronomer Royal of Great Britain (Totten's *Our Race*, No. 14, p. 77). The application of the results to the narrative of the Gospel has been essayed by Andrews, *Life of Our Lord*, pp. 7-9; Edersheim, *Life and Times*, Vol I, pp. 210-13; Abbe Fouard, *The Christ*, p. 382, and by a host of others. (As a matter of wonder it may be noted that, as recently as 1934, this planet-conjunction theory has been revamped and heralded abroad as a new invention by Prof. Oswald Gerhardt of Berlin. His views, first published in *Forschungen und Fortschreiten* [*Researches and Progress*], have been reprinted and endorsed by *Time* on April 16, 1934, and by *The Pathfinder* on May 12, 1934). It suits our purpose best to give a paragraph by Edersheim in its entirety. Speaking of the measures of precaution taken by the tyrannizing king of Judea, the jealous founder of the Herodian dynasty, he says:—

"At the same time he took care diligently to inquire the precise time, when the sidereal appearance had first attracted the attention of the Magi. This would enable him to judge how far back he would have to make his own inquiries, since the birth of the Pretender might be made to synchronize with the earliest appearance of the sidereal phenomenon. So long as any one, who was born in Bethlehem between the *earliest* appearance of this 'star' and the time of the arrival of the Magi, he was not safe. The subsequent conduct of Herod shows that the Magi must have told him, that their earliest observation of the sidereal phenomenon had taken place two years before their arrival in Jerusalem.

"But *two years* before the birth of Christ, which, as we have calculated, took place in *December 749 A. U. C. or five before the Christian era*, brings us to the year 747 A. U. C., or 7 before Christ, in which such a Star should appear in the East.

"Did such a Star, then, really appear in the East seven years before the Christian era? Astronomically speaking, and without

any reference to controversy, there can be no doubt that the most remarkable conjunction of planets—that of Jupiter and Saturn in the constellation of Pisces, which occurs only once in 800 years—did take place no less than three times in the year 747 A. U. C., or *two years* before the birth of Christ (in May [twenty-ninth], October [September twenty-ninth] and December [fifth or ninth]). In the year following, that is, in 748 A. U. C., another planet, Mars, joined this conjunction. . . . Kepler, accordingly, placed the Nativity of Christ in the year 748 A. U. C. [or 6 B. C.]. This date, however, is not only well nigh impossible; but it has also been shown that such a conjunction would, for various reasons, not answer the requirements of the Evangelical narrative, so far as the guidance to Bethlehem is concerned.” (Edersheim, *Life and Times of the Messiah*, Vol. I, p. 205).

Another writer on the subject, in favor of identifying the Messiah’s “star” with the conjunction of Jupiter, Saturn and Mars, is Prof. Totten, author of *Our Race* (No. 14, p. 80). He writes: “Kepler, Munter, Ideler, Encke, Prichard, whose calculations were verified by the Astronomer Royal, are generally agreed that the Star of Bethlehem so long expected, was a conjunction of Jupiter and Saturn in the sign Pisces. Such a conjunction [in its 20°] occurred upon the twenty-ninth of May (7 B. C. = 747 A. U. C.) of this first year of the New Sabbatic Week. 3993 A. M., 6 B. C. “This Civil Hebrew year had no sooner begun than the significant conjunction of Jupiter and Saturn in the sign Piscus (16°) re-occurred (September twenty-ninth or October first) and as if to intensify attention and add renewed import thereunto,—as if by a “triplicity” extraordinary!—it was *again* repeated about sixty-seven days later (December fifth [or ninth]) in 15° of the same sign.”

Now what about it? What has any one of these celestial phenomena to do with the Nativity which Dr. Edersheim places in 5 B. C. on December twenty-fifth, and Prof. Totten in 4 B. C., also on December twenty-fifth? If the last of these three great conjunctions occurred in April 6 B. C. or 748 A. U. C. (Varro), how can this be the “star” of Bethlehem which came *after* the Nativity in 5 or 4 B. C., and guided the Magi at least as late as January sixth to the place where the young child was? And not only where the young child was, already born and circumcised and removed from the cave to a “house,” but where, in company of other young children, He had attained the age of “*two years or under*?” Besides, if there had been still another combination of planets subsequent to the Birth of Christ in 5 B. C. or 4 B. C., would this not have constituted a “third” or even “fourth” year? How, then, can those conjunctions of planets be supposed to have been the “star of Bethlehem?”

However that may be, how about an adaptation of the data above suggested to the conditions imposed by the Gospel narrative, or if you will, of the Gospel postulates, to the facts supposed to be well certified? Evidently, if the first effulgence of this constellation composed of the planets Jupiter and Saturn occurred on the twenty-ninth of May, 7 B. C. or A. U. C. 747 (Varro), and so, let us suppose, illustriously signalized the Annunciation to Mary, one full solar year afterward would bring us to the twenty-ninth of May, 6 B. C., when we might expect the Nativity to have taken place three months before, and the triplicated conjunction to have occurred at least twelve days later. But this final threefold consolidation of stars is reported rather vaguely to have happened in the spring of 748 A. U. C. (Varro). If this means that it occurred very shortly *before* the twenty-ninth of May, 6 B. C., and shortly after the second of April, suggested by Kepler as a date for the Nativity, then it is premature and sadly out of harmony with the generally adopted interpretation of the restricting clause "*two YEARS old and under,*" for, in that case, it is very much "*under,*" the "*star's*" radiation not even extending into the *second* year of Jesus and the Innocents of Bethlehem. In that case, none of the little children were more than two *months*, let alone "*two twelve-months old and under.*" In fact, there is no justification for the use of the adjective in the clause "*TWO years old and under.*"

If, on the other hand, the second instance of planetary conjunction be supposed to constitute the Star of the Magi in the capacity of guide to Bethlehem, that is to say, if the Nativity is supposed to have antedated the conjunction of September twenty-ninth or that of December fifth (or ninth) by the forty days' intermission prescribed by the law before the presentation in the Temple, then it will be still more impossible to square the period of the star's effulgence with the age-limitation of Jesus and the Innocents, and we are still more profoundly impressed with the failure of the Wise Men to read the horoscope of the coming king with any degree of precision. It follows, then, as a matter of the most superficial observation that the series of planetary configurations in 7 B. C. and 6 B. C. cannot by any possibility have been the "*star*" of Bethlehem.

Even Kepler, the father and originator of the planetary hypothesis, was therefore led to look for some other sidereal phenomenon as a more acceptable substitute for the "*star of Bethlehem.*" Speaking of Kepler's experience, Dr. Edersheim relates this circumstance: "Observing a similar conjunction in 1603-4, he also noticed that when the three planets came into conjunction a new, extraordinary, brilliant, and peculiarly colored evanescent star was visible between Jupiter and Saturn, and he

suggested that a similar star had appeared under the same circumstances in the conjunction preceding the Nativity." But the introduction of a companion star or satellite does not alter the case in any vital respect. The configurations are left at the same points of time and space, with no better prospects for adaptation. However, this suggestion of Kepler's conducts us to the second grand division of sidereal phenomena proposed in solution of the problem of the Infant Messiah's "star."

The suggestion made by Kepler aroused another great multitude of writers to attempt, each in his own way, to establish the period of effulgence of his own "star of Bethlehem." And since neither a purely planetary nor exclusively sidereal combination was found to be acceptable, another form of conjunction by which the astronomical proof for the appearance of this prodigy might be effected was sought in the connection or combination of some variable or evanescent star, with the sign of the zodiac called Virgo. Now it is true, as Dr. Seiss remarks, and reported by Totten (*Our Race*, No. 14, p. 78): "It is also an astronomical fact, independent of all hypotheses, that at the precise hour of Winter solstitial midnight, 1899 years ago, the sign of *Virgo*, everywhere and always regarded as the sign of the Virgin-mother from whom the divine-human Redeemer-King was to be born, was just rising on the eastern horizon. And further, it is an astronomical fact, independent of all hypotheses, that at the Spring Equinox of the same period, *just nine months earlier*, this Sign of the Virgin, at midnight, was on the meridian itself. Dr. Guinness also notes this and favors the star of the first magnitude in Spica Virginis, as connected with the Nativity, the which we ourselves [Prof. Totten] think probable.

"But we must qualify our judgment by accepting *also* that of Mr. Page, who, citing the prophetic legends, states his belief that the expectation referred not only to some particular star in the Sign of Virgo, but to its being in conjunction with the Sun, or the Moon, or some one or several of the planets, at some particular season of the year, the Vernal Equinox for instance, and that it was for this the Magi sought, knowing that the time was at hand from other chronological prophecies couched in the terms of strict astronomical cycles.

"The fact is, the heavens were full of signs in those days, for now it was that in Coma, one of the Decans of Virgo, the new star blazed forth with unwonted light. It was the first appearance of this particular variable star ["Pilgrim"] in his own days, that led Hipparchus to draw up his star catalogue, about 153 years before the Nativity. It faded away about so many years thereafter, for Ptolemy then reports that it was too small to be easily distinguishable. The fact is, its effulgence reached its meridian

glory at this mundane Midnight Era, and that its position at this period as the Vernal Sign, on the Midnight Meridian at the Vernal Equinox, added significance to the universal cry, "Behold He cometh."

"Since Ptolemy's day we have no record of it. It was in the head of the Virgin born infant which the constellation of Coma signified, both in figure and in name," etcetera, etcetera.

Alongside of this hypothesis, because similar in design, and parallel in allignment, we shall set down the supposition of Father G. H. Trench (in *Birth and Boyhood of Jesus Christ*, p. 143). "We may suppose, then, that the brilliant meteor was seen by the Magi to be in conjunction with the star es simah (marked on our charts as simah or spica or α of Virgo) covering it and seeming to occupy its place in the heavens. As the star Spica had a Right Ascension of about 11h. 40m. in the year 5 B. C., it and the meteor in conjunction with it, would have been rising very shortly before the sun at the autumn equinox, so that the meteor must have been of extraordinary brilliancy to be seen when the Magi first saw it, rising heliacally at about the autumn equinox."

These two instances of identification, by Prof. Totten and by Father Trench are fair examples of the manner in which the desired evidence for the appearance of the Star is sought by composition with the sign of Virgo. Both cover approximately the period of the Star's appearing, and both include the very point of the Epiphany. The results therefore, of the astronomical calculations, so far as they relate to the sign of the zodiac, are clearly in accord with facts and fairly above reproach, but how about the extraneous attachments to the Sign in the shape of a new star or a meteor? Where is the proof that it was a "star" and not a meteor? or that it was a meteor and not a star? That it was not the 150 odd year-old star observed by Hipparchus is evident from the appropriation of the real star of Bethlehem to the Infant Messiah as "*His*" own peculiar star in the sense that it belonged in HIS horoscope as an element to be reckoned with in HIS interest and for HIS glory only. It is further evident that, if the previous appearance of the star observed by Hipparchus must be considered the previous vision observed by the Magi, this preposterous identification would swell both the age and the number of the Innocents to the degree of enormity. So, dismissing the confusion of any variable, evanescent, transient, or shooting star with the "star" of the new-born king of the Jews as impertinent and inappropriate, let us still inquire what the narrower time-limitation pertaining to the more fulminant efulgence of this "star" has to do with the Bethlehem Star's appearing to the Wise Men before and after the Nativity.

Speaking of the gauging of the Messianic Infant's age and the

corresponding age of the Bethlehemitish Infants by the blood-thirsty king Herod the Great, Prof. Totten has this to say: "Indeed, the slaying of the Innocents at Bethlehem soon after, from two years old *and under*, is explicit proof that the wise men had cast the horoscope with absolute precision (i.e. according to some accurate set of astronomical facts, compassing the date of the Annunciation in 3995 A. M. [4 B. C.], the succeeding Passover in 3996 A. M. [3 B. C.], and this one of their arrival, 3997 A. M. [2 B. C.])" There can be no doubt that this assignment of the term of resplendence covers, indeed, a couplet of two full years (what the ancients called a "biennium"), but why he should, in effect and in fact, turn right about and cut down this period to a "year and a half," is not so apparent. If it was a desire to align the celestial announcements with the biblical annunciations, why not synchronize the beginning of this period with the angel's appearance to Zacharias? If, in conformity with the purport of the Word, it was the purpose of the Star to signalize the *birth* of an illustrious person (not his conception), then why not honor the age-old custom of reckoning from birth as the publicly-known and legally-recognized point of computing age or the duration of life? The intention seems to have been, by an ingenious compromise, to satisfy both interpretations of the clause "two years old and under." For, reckoning from the day of actual nativity, the twenty-fifth of December, 4 B. C., according to Totten, the period elapsed by the end of Nisan, 2 B. C., the date of the Epiphany, according to Totten, is just about eighteen months; but, reckoning the Annunciation on March twenty-fifth, 4 B. C. (according to Totten) to the day of Epiphany in 2 B. C., the period is indeed about two full calendar years. The one point of agreement—and that, after all, is the main one at issue—is the final term. In his own words, Prof. Totten says: "We have interpreted these events as falling between the twenty-first and twenty-eighth of Nisan and the whole of the Magian visit as comprehended between March twenty-first and twenty-eighth, 2 B. C."

Now, supposing the point of final effulgence to be definitely fixed by this hypothesis, how does it fit into the order of events as they actually occurred? As we have seen before, the year 4 B. C. could not by any possibility have been the birth-year of Jesus Christ, as per Totten's theory, because the calendric conditions are such that the dates of the cardinal events of the year cannot be made to synchronize with the liturgical basis which Prof. Totten himself presupposes and, as a churchman, endorses. If, then, as we have also surmised before, the Nativity occurred in either 5 B. C. or 3 B. C., the only years in which the Jewish Calendar Cycle can have sustained an intercalation of a month, as required, the period of radiation assigned to the Star and the

children's age, is either protracted to the length of *three* full years or else contracted to the space of only *one* full year, viz. from the date of the Annunciation to Mary to the date of the Epiphany to the Magi. In either case, the promulgated hypothesis is wrong, and is herewith considered disposed of, seeing that this attempted adjustment fails of identification by an entire year either way.

The other composite compromise suggested among others by G. H. Trench, (*Birth and Boyhood of Jesus Christ*, p. 149), concludes the period of the Star's resplendence with the sixth of January, 3 B. C., more than a twelvemonth earlier than the preceding supposition; yet both suppositions place the Nativity in the same year, in the same month, and in the same twenty-four hours which constitute the twenty-fifth day of December, 4 B. C. Since both adopted the same liturgical basis of holidays and feasts, the same objections and exceptions hold good in either case. It remains therefore only to examine the fitness of the latter end of the Star's "two years" period of resplendence in the heavens.

Father Trench writes thus in *Birth and Boyhood of Jesus Christ*, (p. 149): "And whereabouts in the sky was this star *Spica Virginis* on the night of January fifth to sixth in 3 B. C.? A simple calculation shows that, at the beginning of our era, it was close to the autumn equinoctial point, with a Right Ascension of about 11h. 40m. and a Declination of about no'), so that, in the early morning of January sixth, 3 B. C., it would be on the meridian at about 4:30 to 4:45 a.m., and at an altitude of about 58°. At midnight of January fifth to sixth, 3 B. C., *Spica* would be 21° above the E. horizon; at 2 a.m. it would be 51° above; at 4 a.m. it would be 81° above; at 4:36 it would be on the meridian."

It will be observed, before we go any farther, that, in this case, just as in the other, it is tacitly taken for granted that the star *Spica's* rider or satellite, the meteor, was always faithfully at hand, whenever and wherever wanted, like a bodyguard or tutelary saint, with only this bit of difference, that the star which did the ancillary duty belonged in the realm of certain knowledge, while the other which dominated the course of the motion attributed to the "star" guiding the Magi belonged in the domain of the problematic. In very much the same manner, the two-year period of the Star's splendor is extended from the final term of resplendence backward to a point of beginning for which no reason can be assigned from Holy Writ, to wit, the autumnal equinox of 5 B. C. Since, according to this scheme, which synchronizes the sidereal with the angelic announcements, the first observation of the Star occurred approximately at the time of St. John's conception, it seems obvious that Father Trench worked on the presumption that Herod wanted to ascertain the

age of John the Baptist and was mad enough to exterminate all infants two-years old from the first inception of their being. Needless to repeat, the age of children was not computed in that way. But, taken as it is, the allotment of time to Him that was born king of the Jews, even if computed from conception, falls widely below the span of even a whole twelve-month unit. The location of the Epiphany, with the ensuing Infanticide only twelve days after the Nativity (on December twenty-fifth, 4 B. C.), follows too briefly and abruptly ever to acquire the verisimilitude of truth. It is point-blank against the appearance of outstanding facts. No matter how general the opinion that the ritual and office of Twelfth Day or Epiphany are well founded, the massacre of the Innocents cannot have been perpetrated only twelve days after the Nativity; for then the presentation in the Temple must have been accomplished (forty days after the Birth) in utter disregard of natural prudence and in direct contravention to the Divine warning that there was danger afoot in the city of Jerusalem. In fact, the foster-father and guardian of Jesus must have done precisely that which the inspired word of the Gospel says he was afraid to do, viz. go up to Jerusalem while Herod was still fuming with rage and belching forth his devastating commands of death and bloodshed. And not only that. Without due regard to the warning voice of God's messenger, the custodian of Jesus (according to this hypothesis) not only did not betake himself and his ward to precipitate flight, but he returned deliberately and nonchalantly home to Bethlehem, in order to inaugurate thence a kind of vacation outing to Egypt, only to quit its hospitable borders within less than five or six weeks. Can it be imagined that, at such short notice, any refugee from a foreign land could be sufficiently acclimated and naturalized to be qualified for a call out of Egypt? According to Athanasius, the Child Jesus came out of Egypt December twenty-fifth, in the consulship of Silvanus, when he had completed his *fourth* year. The consulship of Caesar Augustus XIII and M. Plautius Sylvanus is permanently fixed to the 412th year of the Julian Period or the second year before the beginning of the belated Christian Era by the twenty-first year of the emperor's tribunitian power, the twenty-eighth of his kingship over Egypt, and the forty-first year of his accession to the government. But four years back from the twenty-fifth of December 2 B. C. would place the Nativity on the same date in 6 B. C., which is at least a twelve-month too early. But be that as it may, be the sojourn in Egypt long or short, there are but two alternatives which may be at all considered "expedient for the saving of this ship": either the final term of resplendence of the Star and its satellite (the brilliant meteor) must be set back a year (which

is impossible), or the date of the Nativity itself must be pushed up a year, so as to create at least a fraction of a second year, if not a full biennium, for the reappearance of the Star after the Child was born. But if another twelvemonth were added, the duration of the intermission would be in excess of "two years" required, and so fail to come under the qualifying clause "*two years old and under*." So the former alternative is out of the question. With the birth of Jesus in December, 4 B. C., and the death of Herod in March 2 B. C., a more than two-year period of effulgence for the Star of the Magi (together with a two-year age-approximation for the Infants of Bethlehem, is clearly not to be considered.

The latter alternative, on the other hand, presents a way of deliverance from the horns of this dilemma. If, instead of December twenty-fifth, 4 B. C., we assumed December twenty-fifth, 5 B. C. to be the authentic date of the Nativity, and instead of January sixth, 3 B. C., we assumed December twenty-eighth, 3 B. C., to be the genuine traditional date for the slaughter of the Innocents, we should have at our disposal a period of time which, due to the capers and pranks of vacillating calendars, presents a marvel of chronological age-limitation, a period which, at one and the same time, but according to different standards, both of two years' duration and yet not of the same kind of two years' duration; a period which, according to Rome's imperial calendar, comprised two perfect and complete *solar* years, but according to the Oriental standard of time-keeping, only two deficient or defaulting *lunar* years; a period, in short, in which the Julian space of twice 365 days, would successfully bridge the intervening chasm between the twenty-fifth of December, 5 B. C., and the twenty-fifth of December in the year 3 B. C., but of which the Jewish, or Syro-Macedonian span of twice 354 days would fall short of connecting these dates by twice eleven days. In no other couplet of years between 5 B. C. and 1 B. C. can such a correlation of dates be produced. It would be no presumption, then, to conclude that we have here, right in this space, and identical with this biennium, the "two years and under" of the mutual understanding of Herod and the Magi, defining the actual age-limitation of Jesus and the Innocents, according to the time of the Star's first effulgence until the time of final evanescence.

We are not ready, however, to sponsor the traditional date for the slaughter of the Innocents. For one thing, the date handed down to us by ecclesiastical tradition is not well enough vouched for by the chief authority in the case, the Gospel according to St. Matthew, or the text of Holy Writ itself. When we consider the enormity of the crime attributed to the king, and

the excessive number of innocent children slaughtered in the desire to slay just one little Babe, we cannot but hesitate at the suggestion and doubt the correctness of the transmission or translation of the original text. As the immensity of the numbers of Jews said by Josephus to have been slain or sold into slavery by the Vespasians (father and son) induces us to doubt his veracity, so the apparently excessive margin in the age-limitation of King Herod's victims compels us to give a moment's consideration to the other interpretation of the text which renders a reduction in the age limit of the Infants not only possible but plausible.

"What was this age? Our translators all say," remarks Mr. Wm. M. Page (in *New Light from Old Eclipses*, pp. 120-121), "from two years and under." Such an order would have affected a considerable number of families, and might, for that reason, have provoked the mention of the order by the profane historian. But Herod's knowledge of the Child's age was derived from the statement of the Magi; they had seen, at a certain time, the star that indicated that the Son of the Virgin had been born. Was it two years before the time that they made inquiry concerning him at Jerusalem? We can scarcely believe it possible; nor can we think (although it is possible) that Herod, having a tolerably exact statement of the Child's age, should order a massacre of children whose ages were considerably beyond the utmost possible limit.

"The original Gospel of Matthew was written in the Syriac; and I venture the opinion that the Syriac word used by Matthew was equivalent to the Greek word *ἐνιαυτός*, which has for one of its meanings a repetition, revolution, or cycle. It is rendered 'year' in the New Testament fourteen times; and is probably so translated in the language of every nation which makes use of the solar year for reckoning the passage of time. But in the oriental countries, such as that of the Magi, time is counted by the revolutions of the moon; and there, the equivalent of the Greek *ἐνιαυτός* might be either month or year; it would probably be month, unless some limitation gave it the larger significance. . . . I therefore think it more than probable, then, that the Magi spoke of months, and not of years, as it stands in our version of Matthew."

As in the theory at bottom of the interpretation "from two *years* and under [in the Greek *διετους*," so in the conception of "two *months* and under" the same latitude of interpretation is allowed. It may mean "entering upon the second month" or it may mean "almost two full months." And as in the former hypothesis, the final vision of the Infant Messiah's Star could not have occurred to the Wise Men before the fortieth day after

the Nativity, so the second sight of the "star," under the present supposition, cannot be placed before the redemption of Mary's First-born in the Temple: it must be located later. It may be brought down to the forty-first day after the Birth, and it may have lagged up to the fifty-ninth day thereafter. If it occurred on the forty-first day after the Birth, the "star" stood still over the place where the young child was on the seventh of Shebat. If it happened on the fifty-ninth day thereafter, the "star" came and stood still over Bethlehem on the twenty-fifth of Shebat. It may have stood at attention on any one of the days of the interval between the seventh and the twenty-fifth of the month; but, at all events under the theory that the age of the Infant and the Innocents did not exceed two lunar months, it must be supposed that the last appearance of the "star," the adoration of the Magi, and the massacre of the little ones all occurred at or before the expiration of that term. So, working on the hypothesis, first, that, under all circumstances, the twenty-fifth day of Apelleus or Casleu must be regarded as the real day of Christ's birth; second, that, in every case, the Star of the Infant Messiah must have reappeared to the Wise Men on any one of the days between the seventh and twenty-fifth of Shebat (i.e. when the Bethlehemish infants were two months old or under); and third, that, in no case, can Herod be supposed to have died *in* or *during* the interval in which the little children reached the age of two months and under, except in the year of his actual decease. Applying this probe to the only years that can have any pertinence, viz. 4-1 B. C., (since Herod is almost universally believed to have died in the beginning of 4 B. C., and he has been demonstrated to have died on the twenty-fifth of January, 1 B. C.), We achieve the following results:—

<i>Jewish = Julian</i>			
58153	58153 ..	69 d. in 5 B.C.	69
29!		177	29!
261	3. Sel. 308 =	{ 29! 29! } d. in Sel.	+261
		{ 177 177 } 308	
58443		452	359
			+ 51
58443	58443		400
+ 41	+ 59	B	418
			-365
7)58484	7)58502		35
			- 31
8354+6 =	8357+3 =		53
Fri.	Tues.		- 31
		4 =	22 =

Jewish=Julian

		-365 d. in 5 B. C.		Fri., Feb. 4th,	Thurs., Feb. 22nd
				4. B.C.	4 B.C.
58536	58536 ..			87	87
1	30			1	1
261	1			+261	+261
4. Sel. 309 =					
58798	324				
		87 d. in 4 B.C.			
58798	58798			349	349
+ 41	+ 59			+ 41	+ 59
		32 } 0			
7)58839	7)58857			390	408
8405+4=	8408+1=			-365	-365
Wed.	Sun.				
		A		25=	43
				Wed., Jan. 25th	- 31
				3 B.C.	
		-365 d. in 4 B.C.			12=
58891	58891 ..				Sun., Feb. 12,
261	354				3 B.C.
5. Sel. 310 =				77	77
59152				+261	+261
		77 d. in 3 B.C.			
59152	59152			338	338
+ 41	+ 59			+ 41	+ 59
		+354 d. in Sel.			
7)59193	7)59211			379	397
				-365	-365
8457+1=	8458+5=				
Sun.	Thurs.			14=	32
				Sun., Jan. 14th,	- 31
				2 B.C.	
		GF			
		-465 d. in 3 B.C.			Thurs., Feb. 1
59245	59245 ..			66	66
30	177			30	30
261	30			+261	+261
6. Sel. 311 =					
59536	177				
		66 d. in 2 B.C.			
59536	59536			357	357
+ 41	+ 59			+ 41	+ 59
		177 } 30			
7)59577	7)59595			398	416
				-366	-366
8511+0=	8513+4=				
Sat.	Wed.			32	50
				- 31	- 31
		E			
		-366 d. in 2 B.C.			
				1=	19=
				Sat., Feb. 1st,	Wed., Feb. 19th
				1 B.C.	1 B.C.
		59629 ..			
		84 d. in 1 B.C.			

Accordingly, if in 4 B. C. the age of the Infant Jesus as well as the age of the Innocents amounted to forty-one days on the fourth of February, or to fifty-nine days on the twenty-second of February, and the death of the demon-like persecutor occurred after the lunar eclipse of March twelfth to thirteenth in the month of April of that year or at any time thereafter, it is obvious

that the slaughter of the Innocents, the visit of the Wise Men, and the appearance of the Star of the King of the Jews, may all very well have taken place at that time, and this may be taken (tentatively) as a possible, if not decidedly probable date for all the enumerated events.

If in 3 B. C. the age of the intended prey and the age of the actual victims of Herod's rage amounted to forty-one days on January twenty-fifth or to fifty-nine days on February twelfth. and Herod is believed to have died in April of the preceding year, it is embarrassingly evident that either the birth of Christ and of the children did not occur in this [Jewish] year or the death of Herod did not take place in the preceding twelve-month. If, on the other hand, the death of the tyrant is claimed to have taken place in this year, the third before the reckoning of the Christian era, then the fact is to be confronted that there was no eclipse of the moon visible anywhere in the year 3 B. C. It cannot therefore have been the death-year of Herod, nor can the foregoing twelve-month (4 B. C.), under the *two-months'* theory, have been the birth-year of Jesus and the Infants.

Again, if in 2 B. C. the sufferers under the persecution of Herod had attained to the age of "two months old and under," viz. the forty-first day on February thirteenth or the fifty-ninth day on the second of March, and the lunar eclipse of January twentieth is supposed to be the one which frowned upon Herod's barbarous punishment of the forty youths and their teachers shortly before his death, then it is certain that Herod the king whom the Magi sought was not to be found in Jerusalem for at least the latter half of the infants' age. For, assuming that the Passover of that year, which Archelaus, the succeeding son of Herod, attended when the obsequies of Herod were over, fell on the $[66+14=]$ eightieth day of the year [2 B. C.]; that the seven days' mourning of Archelaus was identical with the pre-Paschal week of purification (John XI. 55), i.e. from the seventy-third to the eightieth day of the year; and that the twenty-five of the funeral procession extended from the forty-eighth to the seventy-third day of the year, it follows that the death of Herod occurred [hypothetically] on the forty-eighth day or February seven-teenth, five days after the execution of his son Antipater on February twelfth (the forty-third of the year) and after an indefinite period of not more than twenty-three days between this doing away with his son and the burning alive of the zealots to spend in the vain effort to regain his health and the frustrated attempt upon the leading citizens' lives. With only the six days between the fourteenth of January, the day after the Christ-child's presentation in the Temple and the zealots' burning at the stake on the twentieth of January, that is, with not more than

a week's residence in the royal city, it is doubtful whether Herod was to be found at home even during this brief interval. If, then, other things being equal, it may be assumed that Jesus and the Innocents were born near the close of the year 3 B. C., so that between the fourteenth and twentieth of January, they were approximately "two months old," there is the bare possibility of an audience or interview with Herod the king and of an adoration of the Wise Men, and consequently, too, the bare possibility of the new-born King's coming into the world in 3 B. C.

Finally, if in the year 1 B. C. the age of the slaughtered children and the age of the new-born Christ-Child had amounted to forty-one days on the twenty-first of January and to fifty-nine days on the eighth of February, and Herod died, according to the Talmud on the first or second day of Shebat, which is the twenty-sixth or twenty-seventh of January respectively, only two weeks and two days after the eclipse which signalized the death of the sophists, it is plain as a pikestaff that a visit by worshipful wise men, together with an observation of the stars and a wholesale assassination of innocent children, does not fit into the environment of this date. At the beginning of the children's two-months-age-limit the king was a very sick man, conveyed to Callirhoe, a trans-Jordanic health resort, confined to his bed in old-time Jericho; at the end of that period he was already dead and being borne by slow stages to his magnificent mausoleum at Herodium. It follows, therefore, that, while the present year, Sel. 312 or 1 B. C., may, and indeed must, be regarded as the death-year of Herod the Great, it cannot under any circumstances, be considered the death-year of the infants of Bethlehem nor the year of the effulgence of the Infant Messiah's Star "two months or less" in the wake of the Messiah's birth.

If there is anything to be learned from this symposium of miniature calculations, it is this, that every year included in this series is more or less absolutely ruled out of the picture—save *one*. That one and only year, uneliminated in the rank and file of natal possibilities, bears on its face all the life-like features of reality. Such life-like, realistic harmony with all the conditions and postulates of the case can be discovered only where it is natural to find it, that is, where it is and where it belongs.

Judging from the easy elimination of all the select years (Sel. 308—311 or 5—2 B. C.) but *one*, we may fairly conclude that we have found the chronological site of the great event of which all the other incidents—the illumination of the Magi's path by a "star," the adoration by the Magi of the Infant Messiah, and the consecration of the Innocents of Bethlehem to the high estate of protomartyrs for Christ,—were but attendant circumstances. Whether these minor incidents, such as the massacre of the

martyred Innocents more properly belongs to December twenty-eighth, 3 B. C., or to the interval between the fourth and twenty-second of February, 4 B. C.; whether the Wise Men came to offer worship and honor and gifts to the king of the Jews on the sixth of January, 3 B. C. or 4 B. C., as the only conceivable Epiphany dates under the two-years theory, or in the interval between the forty-first and fifty-ninth day after the Nativity under the "two-months" theory, should not be difficult to decide. The latter view seems ever so much more rational and natural than the former.

But, setting aside the consideration of minor things, let us conclude with an appraisal and evaluation of the "star" itself, which was expected to yield astronomical evidence anent the Nativity of Jesus Christ. According to Mr. Page (*New Light from Old Eclipses*, p. 125), "many persons (but few astronomers) believe the star to have been a special manifestation of the Divine creative power, which fulfilled its purpose, and then forever passed away." This belief appears to be the only view consistent with the purpose and intent of the writer, whether rational in itself or preposterous. We find that this so-called "star" was on a par with the darkness which hung over the land at the crucifixion of this same king of the Jews, which was not a natural eclipse of the sun, which was never intended for recalculation like an ordinary factor in chronology, and which, for that reason, can never afford the slightest assistance for the determination of the life-time of Jesus or the establishment of the date of Easter. The author, therefore, is not far in the wrong when he concludes: "If it was a miraculous star, anything which might be written on the subject will never afford any additional light on the subject of the chronology of the Saviour's life."

If, then, we ask ourselves, What definite information or new knowledge, if any, about the identity of the Star, and about the time of its appearing to the Magi, have we acquired by this examination into the various hypotheses and theories herein advanced? we must candidly confess, Absolutely nothing! But this one thing we certainly have learned out and out, that it is always best to take a writer at the face value of his words, and not at a valuation foreign to his mind. The writer of the Gospel according to St. Matthew did not intend to write an astronomical essay for the Hebrew Academy of Mathematical Sciences, and did not use astronomical terms when he did write. We have therefore no right to expect that the phenomenon mentioned in his work should be considered verifiable by the principles and processes of astronomical research. Many authors of antiquity, both Hebrew and heathen, or Jewish and Gentile, have written and composed books as he has done, and have not been sub-

jected to the same mode of treatment. Why should not their miracles and marvellous tales be taken as they are told? "I cannot tell how the truth may be: I say the tale as 'twas said to me."

Thus, in the literary collection of the ancient Hebrews, now called the Old Testament or simply the Bible, the author of the Book of Exodus has this to say: "And they [i.e. the children of Israel] took their journey from Succoth, and encamped in Etham, in the edge of the wilderness. *And the Lord went before them by day in a pillar of a cloud, to lead them the way; and by night in a pillar of fire, to give them light; to go by day and night: He took not away the pillar of the cloud by day, nor the pillar of fire by night, from before the people.*" (Exod. XIII. 20-22)

In his *History of the World*, the celebrated Greek author, Diodorus Siculus, has this to say: "In this voyage an unusual and remarkable thing happened to Timoleon, the providence of the gods seeming to favor his undertaking, and thereby to point out the future fame and glory of his actions. For, all the night, a light like a burning torch in the heavens went before him, till the fleet came to the coasts of Italy" (*Hist. Libr. B. XVI. C. XI*).

And, in the Gospel according to St. Matthew (II. 9), the author of this book of the New Testament says: "And when they had heard the king, they departed; and, lo, the star, which they saw in the east, went before them, till it came and stood over where the young child was."

Any attempt to connect these extraordinary luminaries with normal astronomical bodies, and, by dint of such consolidation, composition, or conjunction, to prove the problematic probable, the conjectural certified, and the unknown undoubted truth, must end, as we have seen, in ultimate failure. We discover, ere long, the cloven foot of unmeet compromise, and, condemning the expedient of double-dealing, we fly to the alternative of neither-receiving. That is the end to which logic will lead us. If, then, the Star of Bethlehem was not the one, nor the other, nor yet a combination of the one and the other, then it was probably neither the one nor the other.

We may therefore conclude our remarks on the data propounded for establishing the date of the Nativity with a few words from Abbe Fouard (*Life of Jesus*, Vol. I, p. 383), and proceed to the next. His words are: "After all, the wisest plan is to admit that all the circumstances surrounding this heavenly Visitant were part of a *miraculous* dispensation. In ancient times Christianity never entertained any other idea on the subject. Antiquity always looked upon the Star of the Magi as a flaming meteor, upholden in the heavens as a Sign by the hand of God: and hence it must have moved in an Orbit which was not traced

out for it by astronomical laws, but by the Untrammelled Will of Him whose Messenger it was."

3. THE FIFTEENTH YEAR OF TIBERIUS CAESAR

Having considered an argument for the Birth-Year of Jesus Christ from matters purely astronomical, and another from matters quasi-astronomical or astrological, we come now to consider arguments derived from mundane affairs, documentary, monumental, and so forth. The argument possessing the greatest catholicity or cosmopolitan character, is the line of argumentation drawn from the fifteenth year of Tiberius Caesar.

Through no fault or merit of his own, nay, rather in spite of the drag of his own indifference, Tiberius Caesar came into the honor of bestowing the distinctive nomenclature of an epoch-making date on the greatest event of history. Not that the fact itself was such that it required a special preferential treatment. Any one of the various chronological epochs and eras of the Orient would have sufficed to fix this fact in the Scale of Time and to perpetuate its memory as an established date of history. But there are those who believe, not that this date as commonly accepted should constitute the starting-point of a new era, but that this date should be established on a strand of years the starting-point of which shall be unusual, extraordinary, and, but for this solitary, lone emplacement, entirely unheard of and unknown. Not satisfied with this demand, it is desired that this selection of an unused and altogether unknown scale of time shall be presented as the predilection and favorite choice of the people for whom this unique selection was made. In other words, the postulate is, that the case in question, the dating of John the Baptist's and Jesus Christ's ministry in the fifteenth year of Tiberius Caesar,—shall be so represented that the Orientals' preference for the earliest possible reign of Tiberius shall become manifest in the choice of the era on which this event is thus engrafted, the idea being that the people would rather see this event commemorated on a subordinate, subsidiary, and every way second-rate era than on the regular, ordinary score, if only, by so doing, it would redound to the greater glory of Tiberius and to the credit of the evangelist who succeeded in discovering this extraordinary scale.

It is true, the Orientals in general—Egyptians, Syrians, Jews, and all Asiatics—had no particular reason for being in glee over Roman overlordship. The Syrians, and the Jews in particular, had neither right nor reason to boast of being in special favor with the emperor. Such, at least, is the testimony of the Jewish

historian (see Josephus, *Antiq. B. XVIII. C. VI. §5*). "And, as a farther attestation to what I say of the dilatory nature of Tiberius, I appeal to this his practice itself; for although he was emperor twenty-two years, he sent in all but two procurators to govern the nation of the Jews,—Gratus, and his successor in the government, Pilate." And Suetonius, in his *Life of Tiberius*, says: "He suppressed all foreign religions, and the Egyptian and Jewish rites, obliging those who practised that kind of superstition, to burn their vestments, and all their sacred utensils. He distributed the Jewish youths, under the pretence of military service, among the provinces noted for an unhealthy climate; and dismissed from the city all the rest of that nation as well as those who were proselytes to that religion, under pain of slavery for life, unless they complied." So the question might well be asked: Why should provincials, and especially Jews, be so enamoured of Tiberius, and so wildly enthusiastic over his administration of the government, that they must go sheer out of their way to prolong the sway of this particular emperor? The great general and conqueror, Julius Caesar, had won the battle of Pharsalia and given autonomy to the city of Antioch. For this the citizens had instituted a new era, and therein was a good reason. The great organizer and administrator, Caesar Augustus, had won the sea-fight at Actium, and delivered Egypt from the tyranny of Cassius and the age-old thralldom of the Ptolemies. For this the Egyptians and Asiatics with them inaugurated the Actiac and Augustan eras, and therein was a good reason. But Tiberius Claudius Nero, who was dubbed by his soldiers Biberius Caldius Mero; what had he done for the eastern provinces, and in particular for Syria and Judea, to merit the distinction of a special era? Had he ever set foot in Syria? Had he come in contact with Judea, even as close as the narrow coast-line leading to Egypt would permit? Had he even before the death of Augustus, so much as sent a message of good-will or a word of command to the east, which might be construed as an act of coregency or joint-administration, or interpreted by the affected provincials as a particularly meritorious act of double-barrelled, yet divided governorship? No, he did none of these things. There is nothing in the life of Tiberius one, two, or three years before his regular historical accession to empire, which might be bolstered up into an act of such magnificence as to justify the foundation of a new era. However great and important his victories in Pannonia and Dalmatia, these had no pertinence and no impressiveness for the Asiatics.

Nevertheless, and all other observations to the contrary notwithstanding, there are those who insist that the provincial readers of St. Luke's Gospel, who dwelt in Syria and Judea, Asia

Minor, and other parts of the East, would, and of right should, involuntarily think of Tiberius in the fifteenth year of his reign one, two, and even three years earlier than would the Roman, Grecian, and Egyptian readers of the Gospel. In spite of the fact that Tacitus, Suetonius, Dion Cassius, and all Roman historians, compute the reign of Tiberius from the death of Augustus; in spite of the fact that nearly all Greek and Latin Church Fathers from Origen and Tertullian down to Epiphanius and Victorius Aquitanus, do the same thing; aye, in spite of the fact that the Jewish historian, Flavius Josephus, computes his reign from the same point only: there are still an innumerable host of commentators, critics, and chronologists who persist in counting the fifteenth year of Tiberius from the imaginary starting-point of their own making. Just to show how divided the supposed authorities are, let us copy a note from Andrews' Chronological Essay in *Life of Our Lord*, p. 28. "In favor of the computation from the colleagueship, Usher, Bengel, Lardner, Jarvis, Greswell, Lichtenstein, Sepp, Friedlieb, Bucher, Patritius, Edersheim, Zumpt, Woolsey, Weiss, [etcetera, etcetera]; from the sole reign of Tiberius, Lightfoot, Meyer, Ebrard, Tischendorf, Ewald, Browne, Ellicott, Ammer, Keil, Sevin, Wieseler, Quandt [etcetera, etcetera]."

It is evident from this prospectus that the mere say-so of any man, however exalted in fame or profound in erudition, can never be decisive in adjudicating a case like this. Nor do we intend to let the reader bow before a vain idol. On the contrary, we intend, by the aid of the only true God's handiwork, the firmament of the heaven, with its lights for signs, and for seasons, and for days, and years, to lay a foundation "sure as the stars in their courses," for the final and infallible determination of the years of Tiberius Caesar. We intend, with the aid of the Creator's time-checks, the solar and lunar eclipses, to mark off the section of time known as the reign of Tiberius Caesar, as unmistakably as the errorless tools and instruments of astronomical science can do it.

As we proceed to make our prime appeal to the incommensurably valuable *Astronomical Canon* composed by Ptolemy, the great astronomer of Alexandria, let us pause to admire the fine display and perfect demonstration of the niceties and minutiae of this arrangement. Including in his catalogue of Babylonian, Persian, Grecian, and Roman kings, a series of historical dates in conjunction with a list of astronomical configurations, the chronology of Ptolemy's *Canon* presents not merely a register of literary value, but a working tool of scientific, yet practical efficiency. In this catalogue of kings all years are perfectly alike—vague Nabonassan years of 365 days each—so that, in the con-

summation of fifty-five successive reigns, extending over a period of 907 years, not a single day has been added in excess nor lost by default through an error in intercalation or the lack of it. Thus, in the case of Tiberius, the twenty-two full years of his reign are marked in the list as those of Nab. 762 to Nab. 783, both extremities being included. The preceding year Nab. 761 is designated as the forty-third complete regnal year of Augustus Caesar, and, being signalized by two eclipses, one of the sun and one of the moon, is anchored for all time in the bed-rock of immoveable chronology. In like manner, the succeeding year Nab. 784, which is known in Ptolemy's *Canon* as the first year of Caius Caesar, the successor of Tiberius, is marked as one of the absolutely immoveable years of certified chronology, mainly by the configuration of heavenly bodies at the birth of Nero, who was born, according to the horoscope of Dendera in Egypt, in this the first year of Caius Caesar. Augustus having died on the last day of Nab. 761, which synchronized with August nineteenth in the year 14 A. D., the first eschathemeron of Tiberius' reign over Egypt (where Ptolemy lived), was the final of Nab. 762, and not that of 761, as asserted by Jarvis, Page, Totten, et al., and as might have been the case if the deified Augustus, by dying only one or two days earlier, had given up this final to his successor. The last eschathemeron in the canonical count passed by Tiberius, as the last milestone marking the borders of his reign, was that of Nab. 783, not that of 782, as supposed by the anachronistic school already mentioned: consequently 783 Nab. is designated as Tiberius Caesar's twenty-second and last year, although he lived and reigned six months and nineteen days longer, that is, exactly 200 days or more than half of the succeeding year (784), and did not surrender to the grim reaper until the sixteenth or twenty-sixth of March, 37 A. D. The first regnal year of Tiberius, therefore, from which we feel bound to compute the fifteenth year of Gospel fame, being punctuated by one of the divinely executed time-checks which no man can forge or falsify, is, as Dr. Jarvis rightly says, "one of the most important points in chronology," and, as such, deserving of special study and investigation.

According to Jarvis (*Chronol. Introduction*, p. 251), "the only eclipse of the moon which happened in A. D. 13 after August nineteenth, was on the seventh of October, at 7h. 45m. evening, and there were only three digits and a quarter eclipsed, or less than one third of the moon's disc. On the other hand, the eclipse in A. D. 14, on the twenty-seventh of September, took place at five o'clock in the morning, and was total. The question now is, to which of these eclipses had Tacitus (*Ann. lib. I, C. XVI=XXVIII*) or Dio (*Hist. Rom. lib. lviii. C. 4*) reference?"

In either case, the fact remains that the obscuration of the moon was the dominant and outstanding factor in the settling of the differences between the Roman commander and his subordinate men, and furthermore, that, in either case, the altercations continued throughout the night and ended only with the break of day. The question then arises from this medley of accounts: Which is the more reasonable to suppose; that the confabulations between the mutineers and the peacemakers continued all night after the trivial obscuration of the evening (in 13 B. C.) had come and gone, or that the peace-overtures were carried on only during the progress of the eclipse (in 14 A. D.) and terminated at once with the end of darkness, both of the night and the adumbration? If Drusus, the Roman commander, decided to take advantage of the slight obscuration of October seventh, 13 B. C., and the transient shadow slipped away long before midnight, what degree of his success is justly attributable to the influence of the moon? Must not the appeal to the soldiers' superstition appear as nugatory and all in vain? But if, on the other hand, he appealed to the total eclipse of the moon on the twenty-seventh of September, 14 B. C., and the apparent answer to his appeal was the abrupt breaking of the darkness of the moon as well as of the night, and the end of all argument with the end of the watch, what natural coincidence could have operated more convincingly, like magic, or like an interposition of divine providence? What need of telling about this trick if it did not work like a charm? We conclude, then, very properly that the circumstances of the lunar eclipse of September twenty-seventh, 14 B. C., conform more naturally and truly to the evolution of facts and the evidences of history than that of October seventh, 13 B. C. We shall, therefore, begin our count of the imperial, regnal years of Tiberius Caesar from Nab. 762 or 14 A. D. as the only legitimate and historically well-authenticated date.

4. AGE OF JOHN AND JESUS AT BEGINNING OF THEIR MISSIONS, "ABOUT THIRTY YEARS OLD"

Counting 762 Nab. as one, or adding fifteen to 761 Nab., which was Augustus Caesar's last full year, the fifteenth year of Tiberius Caesar will be $(761+15=)$ 776, or $(13-14+15=)$ $28=29$ A. D. Translating this date into the years from the building of the City of Rome, it will be: A. U. C. $767+15=782$ [according to Varro]; and in the Era of the Seleucidae or kingdom of the Greeks, $Sel. 325+15=340$ (cf. Eusebius, *Hist. Eccl.* L. 13); while, in the artificial scale of time invented by Joseph Scaliger,

styled the Julian Period, it is $J. P. 4726 - 27 + 15 = 4741 - 4742$. This symposium comprises all the computations of time we intend to employ for the dating of this chronological item. We may now proceed to the consideration of the data directly or indirectly dependent on this important date.

It may be said without fear of contradiction, that the first and foremost matter of fact dependent on the imperial date just decided on, is that which is mentioned in the immediate context on the evangelical synchronization itself. Even if the effort to make an impression on the minds of some fundamentalists is vain, it must be repeated that the fact, so impressively and emphatically brought out by the Evangelist, pertains primarily to John the Baptist, and to the main business and principal employment of the Baptizer. The text itself, in the first and second verses of the third chapter of Luke, is this: "Now in the fifteenth year of the reign of Tiberius Caesar, . . . the word of God came unto John the son of Zacharias in the wilderness." Is this a fact? Well, as truly as this is a fact expressed in the text, it is also a fact expressed in the unsevered context of the same third chapter, in verses twenty-one to twenty-three, that "now when all the people were baptized, it came to pass, that Jesus also being baptized, . . . Jesus himself began to be *about thirty years of age*." etcetera, etcetera. Can it be possible that any one endowed with critical acumen could fail to see the chronological as well as logical connection with the opening verse of this chapter? Yet there are those who wilfully wrest, and violently disconnect, both the primary and the secondary matters of fact from the date imposed on them by divine inspiration. Witness, for instance, this declaration of an orthodox clergyman, a reverend father of the Dominican Order. "The important date given by St. Luke cannot apply either to the baptism of Jesus, or the beginning of John's ministry." Why not? Because, "if the Baptist began his work, and if Jesus received his baptism *in the fifteenth year of Tiberius*, that is, the year [A. U. C.] 782 [according to Varro], it would follow that Jesus, who must have been born before 750, would have been thirty-three years old. But Luke says expressly that he was *about thirty years old*. How then can we deny this clear affirmation, and make the third Evangelist contradict himself?"

Aye, indeed; "clear!"—"about!" Isn't it a grand and glorious feeling, at least once in your life-time, to see the obscure illuminated by the more obscure? to see the certain and definite interpreted by the unknown and indeterminate? to see the positive so magnificently demonstrated by the problematical? Isn't it an elevating experience to perceive that the day of signs and wonders has not yet passed away, and that sleight-of-hand and

legerdemain can still be palmed off on the people as miracles of proof and demonstration? "The date given by the third Gospel," concludes the same biographer, "really marks the *end* of the public ministry of John, and the *beginning* of that of Jesus, which the synoptics have taken care to attach *not to his baptism*, but to the imprisonment of the Baptist." What if we did admit that the Lucian date does include both the beginning *and end* of the Baptist's activity, and does indeed include both the baptism and the opening campaign of his greater successor, what has that to do with the import and intent of that date in the Gospel? "If we take the first and apparently plain sense of the words," says Dr. Ellicott (*Hist. Lectures*, p. 106), "this fifteenth year can only be conceived to date back from the regular accession of Tiberius at the death of Augustus, and will consequently coincide with A. U. C. 782 [Varro],—a date which not only involves the awkwardness of positively forcing us to extend the age of our Lord to thirty-one or more, to make His birth *precede* the death of Herod (certainly April, A. U. C. 750), but also forces us to shorten the duration of His ministry very unduly to bring His death either to the year A. D. 29 or A. D. 30, which seem the only ones that fairly satisfy the astronomical elements which have been introduced into the question by Wurm (*Astron. Beitræge*) and others."

Well, what of it? Which of the twain is it better to do, and withal more logically and morally more imperatively incumbent on us to do; to supplant the positively authentic and historically legitimate time-determination of facts, that is, to supply in its place a fabulous, fictitious substitute; or to straightforwardly recognize and acknowledge the admittedly loose literary phraseology of this chronological limitation, and then to appreciate and honor this vague historical note at its face value? Is it not much more in keeping with our desire to know the truth, the whole truth, and nothing but the truth, to let the definite stand and the indefinite go by default? In order to make the time allowance prayed for by the Gospel author, it is not necessary to understand "about thirty" as a round number, but as embracing any age between twenty-five and thirty-five. A latitude of two or three years is amply sufficient. "So Ammer, Alford, Sevin, Browne says 'any age between twenty-six and thirty-two;' Keil, 'He may have been thirty-two;' Lewin, 'age thirty-three and upwards.'" (Andrews, *Life of Our Lord*, p. 4-5).

Then, if at length we proceed to apply this honestly accepted datum in the looseness and largeness of denotation required and postulated by the gospel-writer, we are prepared to receive a result correspondingly loose and indefinite. "And Jesus, when He made a beginning, was approximately thirty

years of age." That is to say, counting backwards from the fifteenth year of Tiberius Caesar, which extended from the twentieth of August, 28 A. D., to the nineteenth of August, 29 A. D., Jesus lived twenty-eight years under the aegis of the Christian Era A. D., and about two whole years B. C. How many more years He lived before that vague approximation, we for the present, do not know, being content to derive from the present source only the amount of information contained in it, and depending for additional knowledge on those subsidiary sources whose value as evidence divinely inspired and providentially certified is dependent on this evangelical date of Luke's. Let us therefore go on with the application of the next datum dependent on the primary date in the biography of Jesus; "And Jesus, when He began [His mission as the Messiah], was *about* thirty years old...in the fifteenth year of Tiberius Caesar." This datum is found in the nineteenth verse of the fourth chapter of Luke, where all commentators agree a direct reference is made to the then-current "acceptable year of the Lord," meaning the then-occurring seventh Sabbatic or Jubilee year, which in the main coincided with the "fifteenth year of the reign of Tiberius Caesar."

5. THE ACCEPTABLE OR SABBATIC JUBILEE YEAR IN THE FIFTEENTH YEAR OF TIBERIUS CAESAR

The Sabbatic system of seven-year periods or "weeks of years," so far as it is known and so far, indeed, as it concerns us, extends from the year 162 B. C. or Sel. 151 to the year 70 A. D. or Sel. 382, comprising a scale of 232 years and comprehending within its scope a series of thirty four Sabbatic or "seventh years" (including the first "year of rest" mentioned in 1 Macc. VI. 49.53). In this long line of particularly hallowed years, we have a number of outstanding instances of shabuatri whose identity and verification cannot be shaken. There is the first and the last, like the pillars of Hercules, bounding the era, themselves immovable and holding immobile the intervening integers of the whole system. There, for instance, is the sacred seventh year of Sel. 172, indissolubly linked with the thirty-seventh year of the Calippic Period, which, in turn, is held to its place, by the lunar eclipse of January twenty-seventh, J. P. 4573 or 141 B. C. There, again, is the Sabbatic year of Sel. 207, inseparably bound up with the thirtieth year of John Hyrcanus, the reign of Aristobulus and the accession of Jonathan Alexander in J. P. 4608 or B. C. 106. There is, again the fatal seventh year in which Jerusalem first fell into the hands of Herod, twenty-seven years after

it had fallen a prey to Pompey in 63 B. C., and in the seventh year before the battle of Actium (30 B. C.), and therefore inextricably wedged in between these two epoch-making events. Finally, to come down to the point of greatest interest at present, there is that other consecrated seventh year whose prime-time was sorely desecrated by the excesses of anarchy during the brief interregnum between the thirty-fourth year of Herod the Great and the nine years of Archelaus, the son and successor of Herod,—the year which was ushered in with the burning of the zealots and the crucifixion of thousands of fanatics, but the year, too, which was astronomically distinguished by the eclipse of the moon which preceded the death of Herod in J. P. 4713 or 1 B. C. This year, located at the breaking-point of the Christian Era and concluding the line-up of years distinguished as the years “B. C.” [*before* Christ], is the first of the five Sabbatic years to fall within the period which is generally taken to represent the life-time of Jesus the Messiah. Being the sixty-third year since Pompey’s capture of Jerusalem, and the thirty-fifth after Herod’s occupation of the City, it is clear that it must have been a “seventh” year or “year of rest,” for $63 \div 7 = 9$ weeks of years, and $35 \div 7 = 5$ seven-year periods, without a remainder. This being true, it follows that the line of Sabbatic years during the course of the Christian Era from the year 1 A. D. on to the year of Jerusalem’s destruction by Titus ran parallel with the years of that Era. The years of the Christian Era divisible by seven, and leaving no remainder, were the regular “seventh” years or “years of rest,” and no amount of jugglery or conjury can alter the result of plain arithmetic. Accordingly, if we say “28 A. D.,” being divisible by seven, was a Sabbatic year, we only enunciate the truth already expressed by the third evangelist, Luke, when he said it was “the acceptable year of the Lord.” (Luke IV. 19). But this was, by the consensus of all commentators (whether favoring a different series of regnal years or not) “the fifteenth year of the reign of Tiberius Caesar.” We have seen, by private and personal investigation, that there is, and was, only one succession of Tiberian years, and that succession is so well certified and authenticated that there can be no alteration there.

If, then, we bring this sacred system of seven-year periods, as religiously consecrated as the age-old “seven-day system, into relation with the life of Jesus, we will obtain results as definite and decisive as numbers and a little ratiocination can make them. With the negligible exception of a few expositors who conclude from John 8:57 that Jesus was forty to fifty years old when he died, all commentators of note are agreed that His whole span of life might be comprised within the space of *five “hebdomads” or seven-year periods*. If, then, that part of his active

life in which He announced its coincidence with "the acceptable year of the Lord," really coincided with a Sabbatic Jubilee (i.e. $7 \times 7 = 49$, or the "fiftieth year" of John 8:57), the last twenty-eight years of His "thirty" in the fifteenth year of Tiberius will be comprehended in the last *four* "weeks of years," and these, being identical with the first twenty-eight years of the Christian Era, as now established (J. P. 4714 to 4741 inc), will begin with the fifteenth of Tiberius. Following the lead of Tertullian, who counted the years of Christ backwards by consulates, we retrace His age within the lines of the Sabbatic system. The first twenty-eight years, counting backwards, being placed in the first twenty-eight years of the Christian Era, His twenty-ninth will correspond to the first year B. C. or J. P. 4713, which, in the Jewish world, was observed as a "seventh year"; and the last, His *thirtieth*, will square with 2 B. C. or J. P. 4712, which in the hebdomad drawing to a close, was the sixth year of the seven-year period. This, in itself, correct recount of His years would place the birth of Christ at the close of 3 B. C. or J. P. 4711, which, we have seen, would, for calendric reasons, be unfit and ineligible for a birth-year of Christ. For since the ten-year period of natal possibilities (7 B. C. to 3 A. D.) begins with both a new Hebrew hebdomad or week of seven years and with a new Metonic or nineteen-year lunar cycle, it will be easily seen from a prospectus of these various lines which year above "thirty" has any show of coming up to the requirements of the Gospel.

<i>Met. Cycle.</i>	<i>Seven Year Period.</i>	<i>Age of Jesus (reversed)</i>	<i>J.P. or B.C.</i>	
1	I		4707	7
2	II		4708	6
3+	III	33	4709	5
4	IV	32	4710	4
5+	V	31	4711	3
6	VI	30	4712	2
7	VII	29	4713	1

As we have observed, the twenty-ninth and thirtieth years of Jesus (reckoning backwards from the fifteenth year of Tiberius, corresponded to the second and first year designated "B. C.," the twenty-ninth year of His age being out of the question because of its lapse below the level of sacerdotal age, and otherwise because of its belated occurrence long after the death of Herod the Great. The thirtieth year of His age, coinciding with the sixth year both of the Metonic Cycle and the Hebrew Hebdomad, falls below the postulated age-limitation, and, besides missing the year of intercalation, fails to provide enough space for the presentation of the Christ-Child in the Temple before the death of Herod. If then, we proceed to advance the age of Jesus to the thirty-first, thirty-second, thirty-third year (omitting the un-

warranted advance above that age), we shall discover nothing new, but a decided confirmation of the facts already ascertained; to wit, that because the fourth and fifth years of both the nineteen-year lunar cycle and the seven-year economic period fail to provide the necessary calendric conditions to realize the presentation of Christ in the Temple, the reappearance of the Star, the adoration of the Magi, the Slaughter of the Innocents, and the flight of Joseph with Mary and Jesus into Egypt, for which many and weighty reasons the years in correspondence, viz. 3 and 4 B. C., must be considered ineligible as possible birth-years of Jesus the Messiah. Only the year "III" of the seven year period, being identical with the third year of the nineteen-year lunar cycle, contains all the characteristics and conditions required by the Gospel narrative to qualify the year J. P. 4709 or 5 B. C. for the distinction of being the birth-year of Jesus Christ. It has in conjunction with the third year of the lunar cycle the requisite space for an intercalation of, not thirty, but twenty-nine days, and being "*the third year, which is the year of tithing*" (Deut. 26:12), when the people made an end of tithing all the tithes of their increase, it probably also gave occasion for all to enroll themselves, every one in his own city (Matth. 2:3). But be the moving cause the decree of Caesar Augustus or the law of Moses, it evidently was in this year, Sel. 308 or J. P. 4709 (5 B. C.) that "Joseph also went up from Galilee, out of the city of Nazareth, into Judaea, unto the city of David, which is called Bethlehem; because he was of the house and lineage of David; to be taxed [or enrolled] with Mary his espoused wife, being great with child." (Luke II. 4.5)

6. THE FORTY-SIXTH YEAR OF BUILDING OPERATIONS ABOUT THE TEMPLE AND THE AGE OF MARY

If from the data discussed in the preceding chapters we have derived the conclusion that Jesus must have been born in the Julian year J. P. 4709 or 5 B. C., we draw a still more decided confirmation of this evident fact from the positively known duration of building operations about the Temple during the ministry of Jesus and the traditionally well-attested age of Mary, His mother, at the time of His birth. Concerning the age of the Temple at the time of its purging by Jesus, "then said the Jews, *Forty and six years* was this temple in building, and wilt thou rear it up in three days?"

Since the dedication of the Sanctuary, which was completed, as Josephus says (*Antiq. B. XV. C. II, §6*), *in a year and a half*, coincided in a most remarkable manner with the anniversary of

Herod's inauguration as king, to wit, on the twenty-fifth of Casleu or Apelleus, Sel. 296 or December eighth, 17 B. C., it follows that the six months of this subsidiary period must have been the Jewish or Syro-Macedonian months Daesius [Sivan] to Apelleus [Casleu] or the Julian-Roman months June to December, and one whole twelvemonth before this, the operations of rebuilding the Inner Temple must have begun soon after the feast of Pentecost, which fell that year on the sixth of June, 18 B. C. But the building operations began, as Josephus furthermore states, in the eighteenth year of king Herod's reign, counting from the death of Antigonus, the last king of the Asmonean line, in the closing month of 36 B. C. Now $36-18=18$ B. C., and $46-18=28$ A. D. We have, then, the first year of the building extending (approximately) from June sixth, 18 B. C., to June fifth, 17 B. C., and the forty-sixth year (approximately) from June sixth, 28 A. D., to June fifth, 29 A. D. On the assumption that the altercation of the Jewish council with Jesus occurred shortly before the Paschal feast of 29 A. D., it is apparent that the forty-sixth year of Temple building was then current, and not completed, running rather abreast with the Olympic years than with the A. U. C. of Rome, and covering, so far as till then concurrent, both the fifteenth year of Tiberius and the approximately "thirtieth" years of John and Jesus. "All therefore, that this statement respecting the time occupied in the rebuilding of the temple, gives us," concludes Andrews (in *Life of Our Lord*, p. 6), "is the strong probability that the Lord's first Passover was that of 780 or 781 [A. D. 27 or 28]." We would say, rather, the absolute certainty that the Passover meant was that of A. U. C. 782 [according to Varro], or the Julian year J. P. 4742 or 29 A. D. For if the numbers in the text are correct, and the enumeration of the years consumed in the construction of the Temple is faultless, the forty-sixth year of building included the Passover season of A. U. C. 782, or of 29 A. D., and no other. But in the same manner the Passover season of 29 A. D. is inclosed and included in the fifteenth year of the reign of Tiberius Caesar, and in the consulate of the two Gemini, L. Rubellius Geminus and C. Fufius Geminus. Therefore the age of the Temple comprehends not only the age of Jesus up to the point of the temple purgation by Jesus, but also, as we have already observed, the age of His mother Mary. If then we can eliminate from the period of forty-six years the age of Mary at the time of the Nativity, we obtain the precise age of Jesus up to the time of His cleansing the Temple in 29 A. D.

As Jesus, in His response to the demand of the Jews for a sign of His authority to do such things, replied: "Destroy this temple, and in three days I will raise it up," using the word

"temple" in another sense to designate the tabernacle of His body, so, in computing the age of Jesus from the age of the literal temple, we, too, shall employ the word in another sense, alluding to the body of Mary, His mother, also a "temple," but a temple not built with hands, but prepared and made ready simultaneously with the upbuilding of the temple on Mount Moriah. Being conceived on the day of the dedication of the Temple, December eighth, 17 B. C., she was born on the eighth of September of the following year 16 B. C. or J. P. 4698. So we are told by the Christian Church fathers, and so chronology bears them out. Her age, therefore, concomitant with the age of the Temple *less "one year and six months,"* will always be found parallel with the age of the Holy of Holies, or of that inner sanctum, which was complete and dedicated on the eighth of December, 17 B. C. Her life, amounting, as the Fathers have it, (see Anderdon, *Fasti Apostolici*, p. 90), to seventy-two years, came to a beatific close in the same year in which Paul the apostle, repaired to Jerusalem for the last time, on the fifteenth of August, A. D. 57. It is therefore a well-defined, precisely determined measure of time that we have to deal with, and, granting a certain intermediate point as the year of the Nativity, we may fix with precision the time when Mary's Son, the Lord of the Temple, was born.

"That Mary was young at the time of her marriage," says Andrews (*Life of Our Lord*, p. 57), "we may infer from the fact that females were married in the East at a very early age, generally from *fourteen to seventeen*, and often earlier. The Apocryphal Gospels make her to have been, some *twelve*, and some *fourteen*, when betrothed to Joseph." Cunningham Geikie, (in his *Life of Christ*, Vol. I, pp. 448 and 213) repeats this statement and adds: "Even in our day children in Palestine are so early matured that marriages of boys of thirteen and girls of eleven are not unknown." Indeed, Dr. Durbin (in his *Observations in the East*, (Vol. I, p. 125) relates an experience of his own, the offer to him in marriage of a young girl, "just *twelve* years old, the right age for a wife." And Moses Maimonides, the great Hispano-Jewish Talmudic writer, said many centuries ago: "A daughter is a child from the day of her birth till she has finished her *twelfth* year; but when she numbers *twelve* years and one day, she is a virgin." A more trenchant and historically more timely definition of a virgin is handed down by Josephus, who lived and wrote in the same century as Christ and the apostles. Speaking of the children of king Agrippa (in his *Antiquities*, B. XIX, C. IX, §1) he says: "But he [king Agrippa] left behind him a son, Agrippa by name, a youth *in the seventeenth year* of his age, and three daughters, one of whom, Bernice, was married to Herod, his father's brother,

and was *sixteen* years old; the other two, Mariamne and Drusilla, were *still virgins*; the former was *ten* years old, and Drusilla six."

Accordingly we may well inquire: Would it be a matter of wonderment, if we found that Mary [or Mariamne] was a mere slip of a girl, a damsel (Luke VIII. 42) or a virgin (Matth I. 23), when she became the mother of her first-born son? Counting forward from September eighth, 16 B. C. or J. P. 4698, her *twelfth* year will be found to extend from September eighth, 5 B. C. or 4709, to September seventh, 4 B. C. or J. P. 4710, while her fourteenth would reach from September eighth, 3 B. C., to September seventh, 2 B. C. The former would place the Nativity of Jesus in the year 5 B. C., the latter in 3 B. C. The former possible and probable, the latter impossible and out of the question. No other years can come into serious consideration. The latter, if at all admissible, would represent Mary as a virgin and marriageable young woman according to Maimonides, but not according to Josephus. The former, if accepted, would not only bear out the interpretation according to Josephus, but would add the phenomenal emphasis of a darkening of the moon on the day of the Annunciation to Mary. For whether we regard it as a matter of accidental or providential coincidence, it is a matter of fact, not to be ignored or diagnosed away, that, in the hour when the power of the Highest was overshadowing the Queen of Heaven, the law of Nature was also overshadowing the queen of night. The total obscuration of the moon on the fifteenth of Xanthicus or Nisan and the Annunciation to Mary on the twenty-fifth of March can fall closely together only in the year 5 B. C., and, in the way of natural sequence, the twenty-fifth of Apelleus or Casleu can synchronize with the twenty-fifth of December only in the selfsame year, J. P. 4709 or 5 B. C. This year, therefore, being the third year of the current nineteen-year cycle, which alone in this connection was capable of intercalation and therefore alone eligible as a natal possibility, is logically believed to be the genuine and authentic year of the Nativity.

7. THE CENSUS DECREED BY CAESAR AUGUSTUS

Another argument for the determination of the Nativity of Jesus brought forward very prominently and with the expectation of producing the best results, is the appeal to the "decree of Caesar Augustus that all the world should be taxed." The issuance of this decree of the emperor is supposed by a host of believers in Christ to have antedated the Nativity by so close a margin that it may be regarded with propriety as the very moving cause of His being born at Bethlehem instead of Nazareth. It

stands to reason, therefore, that this datum should deserve the utmost deference at our hands, and should accordingly receive the most painstaking consideration.

As the date of Herod's death, *before* which Jesus must have been born, is believed by the majority of chronologists to have been established "with absolute certainty," so the decree of Augustus, *after* which He must have been born, is supposed by many to be a certified and well-emplaced matter of fact. In truth, the decree ordering a general census and enrolment with a view to taxation is regarded by many as so well authenticated that it may serve as a principal point of departure in calculating the time of the Nativity. Some go so far as to claim that the Lucan enrolment was one of the three great ecumenical, or world-wide, census affairs carried out and spoken of by Augustus himself, in the little book entitled *Breviarium Augusti*, and inscribed on the marble monument erected at Ancyra. The three descriptions are herewith presented (as may be found in Totten's *Our Race*, No. 14, pp. 33, 72 and 147).

"During my Sixth Consulate I made a census of the people, having Marcellus Agrippa for colleague. I performed the Lustration after an interval of forty-one years, and 4,163,000 Roman citizens were inscribed."

"Another Lustrum was closed by me alone with consular power, Censorinus and Asinius being Consuls, and in this Lustrum 4,233,000 Roman citizens were inscribed."

"A third Lustrum was closed by me with consular power, Tiberius Caesar being my colleague, under the consulate of Sextus Pompeius and Sextus Apuleius. In this Lustrum 4,137,000 Roman citizens were inscribed."

Now, nothing could be more unfortunate than the choice of any one of these three enrolments as the census commanded by the Roman emperor very shortly before the Nativity. Not only have they no relevancy to the proletariat of the provinces or even to the unfranchised population of Rome itself: these three catholic (or universal) censuses are expressly stated to pertain exclusively to Roman *citizens*, or to those privileged and favored classes of population whose prize and treasured possession it was to say: "*Civis Romanus sum*." The high prerogative for which the Latins fought in the early days, the privilege the acquisition of which the people of Spain boasted to have first accomplished, but whose precedence of cherished exercise the Gauls disputed and denied; the prestige whose benefits and protection individuals and communities contended for—that was the characteristic and crowning feature of these distinctively *Roman* lustra, of which the three concluded by Augustus were the seventy-first, seventy-second, and seventy-third. (Cf. Clinton's *Fasti Hellenici*, Vol.

III, p. 456). During the entire period of coeval existence with the second Temple at Jerusalem, the republic of Rome had executed no more than seventy of these lustra, and up to the time of the Vespasians or the destruction of the Herodian Temple, the empire of Rome added no more than five in the space of a hundred years.

Now, all of these seventy-five registrations had for their avowed and precisely worded object the enumeration of *Roman citizens*, whether resident at Rome or residing in the provinces, but *citizens*, and *Roman citizens*, only. And as if in anticipation of a necessity to safeguard these census accounts of the adult male citizenry of Rome against possible misunderstanding or misrepresentation, a number of them check up the number of *citizens* in opposition or contradistinction to the unfranchised slave and subject population of the state. Thus the thirtieth census in 293 B. C. contradistinguishes 262,322 citizens vs. 1,114,288 non-citizens; the fifty-second in 168 B. C. 312,805 citizens vs. 1,328,728 non-citizens; the sixty-second in 114 B. C. 394,336 citizens vs. 1,675,555 non-citizens; the seventy-first (first Augustan) in 27 B. C. 4,063,000 citizens vs. 17,258,761 non-citizens; and the seventy-fourth in 48 A. D. 5,984,072 citizens vs. 25,419,066 non-citizens. In the seventy-fourth census and lustrum, concluded by the emperor Claudius in the eighth year of his reign, which was the 801st year from the foundation of Rome [according to Varro] and the consulship of Aulus Vitellius and Lucius Vipstanius, we are particularly interested. In this muster of male adult *Roman citizens*, amounting to nearly six million men, there was certainly enrolled the name and vital statistics of one Saul of Tarsus, who, being accused before Felix, the governor of Syria, of disturbing the peace, was proud to appeal to his rank and station in the Roman state, saying, "But I was a Roman born." (Acts XXII. 28) This was an honorable position not occupied by Peter, or James, or John, or any of the other apostles, nor was it the standing, so far as we know, of Joseph, the reputed father of Jesus, nor that of Jesus Himself. Jesus, so far as we are able to ascertain, was not a favored citizen of Rome, or of Athens, or of Alexandria, or of Babylon, or even of Jerusalem itself. He was a denizen of the world at large, and as such not registered in any census, least of all in one of the seventy-five lustrations of the citizenry of Rome.

It is, therefore, unfortunate, we repeat, that any attempt should ever have been made to identify the taxing of Luke II. 1 with any one of the three registrations of Augustus known as the seventy-first, seventy-second and seventy-third lustra of Rome. Particularly infelicitous, however, is the selection of the intermediate census which, we regret to say, was enacted into a

matter-of-fact or of past history in the year A. U. C. 745 [or 746 Varro or 7 B. C. In the *first* place, it was not "the *first* registry" or "taxing" instituted by Augustus, but the *second*. In the second place, it was the second instance of that class of registration which pertained, not to the enlistment of all classes and masses of the people, men, women, and children, amounting to about twenty millions, but only to the enrolment of male adult citizens of the Roman state, amounting to the explicitly published total of 4,233,000. In the third place, it was a numbering of Roman citizens and, if you please, of non-citizen inhabitants as well, which, on the later day of the Nativity, was a thing already done, "lately finished," recently executed and accomplished ("*nuper lustrum solus feci*")—a transaction foreclosed and precluded two years in advance of the date of Christmas, an historic incident recorded in the files of the government, and ordered engraved on the marble and bronze monuments of the times. It is therefore patent beyond the peradventure of a doubt that, whatever census may have been meant by the "first registry" or "taxing" made by order of Augustus, it was not the second ecumenical muster of grown-up men, expressly named and enumerated as Roman citizens, which does not admit of the enrolment of an infant and his mother, even though it be the mother of God and Jesus Christ Himself. And though it may be a fact that this second registry of Augustus was broadened and extended so as to include women and children of the provincial proletariat in a sum total of about twenty millions, this fact is not on record, and if it were, would be of no avail, since then it would have been closed and barred against the possibility of increase or change by the time the Nativity can have taken place. This identification is therefore impossible.

If, on the other hand, the desire or the necessity existed for the selection of another of the three lustra of Augustus, as the survey in which Jesus was enlisted, the third and last would be the most successful of the three. Jesus would then be about seventeen years of age, and would then, in 14 A. D., just come under the requirements and qualifications demanded for enrolment in the census. But this being altogether out of the question, we shall rather inquire what other forms of survey and registry for the purpose of taxation were prevalent in the days of Caesar Augustus.

Beside the enrolments of the Roman citizenry, which, in the transition period from the republican to the imperial form of government, had become only occasional and of irregular recurrence, there were also regular or periodical registrations of all subjects of the state of Rome for the purposes of assessment and poll-taxation. It must be understood as self-evident that the

object of these quinquennial registrations was not the vain-glorious boast of great names and numbers, nor the visionary display of tabulations and statistics—a mere form of facts and figures—but the practical, utilitarian means of raising revenue and recruiting the army. It would be unlike the hard-headed and tight-fisted people of Rome to indulge in the tremendous demonstration of energy required to execute a census just for the poor pittance of red tape and vain applause, when they might as well levy tribute and taxes on their subjects. And it would be unlike the men of every defeated nation to engage in tumults and war-like commotions when no curtailment of their income and no infringement of their liberties was intended. The relationship, therefore, of taxes and tumults, like that of cause and effect, runs frequently through the texture of time like a gold and scarlet thread, so that, from the presence of the one, the precedence of the other may safely be inferred.

Thus, in the series of registrations recurring every fifth year and running through the multiples of five comprehended in the possible life-time of Jesus, the foregone provocation of a census may be deduced from the prevalence of “commotions in Germany” in J. P. 4707 or 7 B. C.; from the “evident signs of approaching commotions” in J. P. 4717 or 4 A. D.; from the reverses to the Romans in Illyricum in J. P. 4722 or 9 A. D.; and from the reestablishment of tranquility in Armenia, Cappadocia, and Comagene in J. P. 4732 or 19 A. D.

But while the transaction of a quinquennial taxation during this period is sometimes only implied, at other times explicitly stated, as in J. P. 4722 or 9 A. D. (Jos. *Antiq.* B. XVIII. C. I. §1) and in J. P. 4742 or 29 A. D. (Matth. XVII. 24.25 and XXII. 17–19), the continuity of the system is as well established as the consecutive order of numbers can make them. We may therefore accept it as an historical fact that such a series of taxations was resumed and enforced by Augustus, and that it included the years 7 B. C. and 2 B. C. as the first two instances of it within the possible span of life allotted to Jesus Christ on earth.

The mere statement of the facts appears sufficient evidence that neither the former nor the latter “taxation” had anything to do with the removal of the parents of Jesus from Nazareth to Bethlehem for the purpose of being enrolled and taxed in compliance with the decree of Augustus. The latter “taxation” (in 2 B. C.) was obviously too late, since Jesus was most probably, if not certainly, born in 5 B. C.; and the former was quite as obviously too early, seeing that long ere the mother of Jesus set out for the birth-place of her Son, the taxing and enrolment of 7 B. C. was already a thing of the past. That it was a closed incident and a forgotten event before the year was over, may be

inferred from the duration of those cases of taxation of which, by a singular, almost providential coincidence, we have a record of the time. Of the last taxation in the course of his life, we know that Jesus had the Herodians show Him the tribute money only a few days before He was charged with forbidding to give tribute to Caesar (compare Luke XX. 22 with Luke XXIII. 2). And of one of the earliest taxations in the course of His life, we are told by the Jewish historian that this greatest and most famous of all Jewish descriptions was executed and ended "when Cyrenius had now disposed of Archelaus' money, and when *the taxings were come to a conclusion*, which were made in the thirty-seventh year of Caesar's victory over Antony at Actium." (Jos., *Ant. B. XVIII. C. II. §1*). It is useless then, to expect any identification from the series of quinquennial taxations.

There remains, therefore, only one alternative—to look for a taxing decreed by Augustus so singular and so detached from every known series of taxation that it must be regarded as the only one of its kind. There is a mention of such a unique sporadic instance of taxation in Herod's life, but whether it was a fully evolved fact, or only a feebly developed feint, it is hard to determine. We allude to the threat of the enraged emperor conveyed to the irate king of Judea, that, whereas of old he had treated him as an associate, he would henceforth treat him as a subject. If this threat of a taxation, or subjection to tribute, implies that the decree commanding the registration of all people and the appraisal of all property was actually issued; that the command to enroll was obeyed by the people; that the reconciliation between the estranged emperor and the mortified king took place some time before the date of the Nativity, but was made known and publicly announced by the messengers of peace on the eve of the first Noel, and that, consequently, the divine purpose of this decree was providentially accomplished, though the imperial desire to increase the revenue of Rome incidentally failed of fulfillment, then the time of this intended registration and taxation may be definitely fixed with the aid of a series of events enumerated by Josephus in a rather rambling and tedious mass of small talk.

In default of a technical chronological annotation, we shall have to avail ourselves of the only measure of time amenable to our service, the mention of the shipping or sailing seasons in the closing octave of Herod's regnal years. For since, in those days, shipping was suspended during the winter months and the sea was declared "closed" from the eleventh of November to the thirteenth of March, every mention of maritime enterprise means a separate and distinct "sailing season" or summer, and that, again, is equivalent to so and so many solar years. In the case,

therefore, before us, i.e. the last eight years of the Dionysian Era "B. C.", which happened to be also the last eight years of Herod's life, we have a maximum of eight sailing seasons mentioned in the long-drawn-out account of Herod's family affairs. Not every one of a possible eighth either is expressly mentioned (the second and fifth being omitted,) but here is a list containing the remaining six.

B.C. 8	Herod's sailing to Rome,	see Jos., <i>Antiq.</i> B. XVI. C. IV. §1.
B.C. 7	Herod's rapine of David's sepulchre,	see Jos., <i>Antiq.</i> XVI. VII. 1.
B.C. 6	Herod's sailing to Rome,	see Jos., <i>Antiq.</i> XVI. IX. 1.
B.C. 5	Sailing of Nicolaus of Damascus,	see Jos., <i>Antiq.</i> XVI. IX. 1.
B.C. 4	Council at Berytus	see Jos., <i>Antiq.</i> XVI. XI. 4.
B.C. 3	Sailing of Antipater, Sylleus, etal.	see Jos., <i>Antiq.</i> XVII. III. 1.
B.C. 2	Sailing of Herod's ambassadors,	see Jos., <i>Antiq.</i> XVII. VI. 2.
B.C. 1	Sailing of Herod's son Archelaus,	see Jos., <i>Antiq.</i> XVII. X. 1.

If now, in addition, we draw a diagram of this period and fill in the facts as they come along, we shall find, without any effort at adjustment, that the emperor's curt note to Herod is recorded in the IXth chapter of the XVIth book of the *Antiquities*, and that the episode there reported falls naturally into the summer or sailing season of 5 B. C. The provocation for this note was given by Herod's ill-advised expedition into Arabia, at a time when Augustus, being consul as well as emperor, was doubly jealous of his authority. It was in the spring of the year when Caesar Augustus and L. Cornelius Sulla were consuls. Because he undertook, with the aid of a military contingent, to collect a debt from Sylleus, with the permission of the governor of Syria, Saturninus, but without the consent of the consul and autocrat, Caesar Augustus, that the latter threatened to subject Herod to all the indignities and duties of a conquered enemy. In terror Herod dispatched his best friend and diplomat to the Roman capital to plead his cause. It was now the summer of 5 B. C. In the autumn of this year his ambassador returned to Judea with the message of great joy that the lord of the world had become reconciled to him. Was it a wonder that the whole Jewish world should ring and reverberate with joy as with the songs and music of heaven?

If, then, we accept this episode in the life of Herod as the occasion which brought about the birth of Jesus at the little town of Bethlehem rather than in the larger city of Nazareth, we can settle the location of the Nativity beyond dispute. The consulate of Caesar Augustus, during which all these incidents occurred, was the fifth before the consulate of Caius Caesar, which, in its turn, has been unalterably fixed to the first year of the Christian Era by the letter of Augustus to his grandson. This letter was written in the course of the latter's consulship then current, in the sixty-fourth year of his own age, on the day after his birthday,

September twenty-third, 1 A. D. This twelfth consulship of Caesar Augustus was furthermore the third after the re-formation of the Roman calendar and the second census and lustrum conducted by himself in the consular term of Censorinus and Gallus', the twentieth year of the Augustus Era and the twenty-eighth of the regnal years of Herod. If, then, the twelfth consulship of Caesar Augustus was without doubt the fifth year before the beginning of the common Christian Era, and this was the time of the emperor's disciplinary action or gesture of a threat against Herod, and this threat of a general enrolment and taxation led to the removal of Mary and Joseph to the place of His birth in Judaea, it follows without further dialectic ado that Jesus was born at the close of that year. And that year is known to us as J. P. 4709 or 5 B. C.

While we thus admit that the argument from the Augustan decree "that all the world should be taxed" contains an intimation that Jesus was born in 5 B. C., we must also admit that the claim that He was born "while Cyrenius was governor of Syria" is not, and cannot be proven. No mention has hitherto been made of Cyrenius or P. Sulpicius Quirinius, because he is not introduced by Josephus or any other Jewish historian before the historic taxing of the whole Jewish world in A. D. 9. If, for the sake of self-satisfaction, the studious reader of history will turn to the pages of the *Antiquities* of Josephus and trace out the contexts of the passage telling of the supposititious or threatened taxation of Judea in 5 B. C., both before and after, as we shall catalogue them, he will find that, so far as the governorship of Syria is concerned, there was no room for Cyrenius in the interval.

B.C. 6	<i>Titus</i> , president of Syria	See Jos., <i>Antiq.</i>	B. XVI.	C. VIII.	\$6.
	Herod's sailing to Rome	See Jos., <i>Antiq.</i>	XVI.	IX.	1.
B.C. 5	Saturninus and Volumnius press.	See Jos., <i>Antiq.</i>	XVI.	IX.	1.
	Herod's raid on Sylleus	See Jos., <i>Antiq.</i>	XVI.	IX.	2.
	Aug. Caesar's threat of taxation	See Jos., <i>Antiq.</i>	XVI.	IX.	3.
	Sailing of Nicolaus of Damascus	See Jos., <i>Antiq.</i>	XVI.	IX.	4.
	Birth of Jesus at Bethlehem				
B.C. 4	Saturninus and Volumnius press.	See Jos., <i>Antiq.</i>	XVI.	XI.	3.
	Council at Berytus	See Jos., <i>Antiq.</i>	XVI.	XI.	1.
	Three hundred officers stoned	See Jos., <i>Antiq.</i>	XVI.	XI.	7.
	Sons of Mariamne strangled	See Jos., <i>Antiq.</i>	XVI.	XI.	7.
	Infants at Bethlehem slaughtered				
B.C. 3	Saturninus president of Syria	See Jos., <i>Antiq.</i>	XVII.	I.	1.
	Slaying of Pharisees, Bagoas, Carus,	See Jos., <i>Antiq.</i>	XVII.	II.	4.
	Sailing of Antipater, Sylleus, etal.	See Jos., <i>Antiq.</i>	XVII.	III.	2.
	Saturninus president of Syria	See Jos., <i>Antiq.</i>	XVII.	III.	2.
B.C. 2	Change in high-priesthood	See Jos., <i>Antiq.</i>	XVII.	IV.	2.
	<i>Varus</i> president of Syria	See Jos., <i>Antiq.</i>	XVII.	V.	2.
	<i>Varus</i> assessor to Herod	See Jos., <i>Antiq.</i>	XVII.	V.	2.7.
	Sailing of Herod's ambassadors	See Jos., <i>Antiq.</i>	XVII.	VI.	1.
	Mounting of Golden Eagle on Temple Gate	See Jos., <i>Antiq.</i>	XVII.	VI.	2.

B.C. 1	Change in high-priesthood	See Jos., <i>Antiq.</i>	XVII.	VI.	4
	Death of Antipater Jan. 20th	See Jos., <i>Antiq.</i>	XVII.	VIII.	1
	Death of Herod Jan. 25th	See Jos., <i>Antiq.</i>	XVII.	VIII.	1
	Slaughter of 3000 men	See Jos., <i>Antiq.</i>	XVII.	IX.	3
	<i>Varus</i> president of Syria	See Jos., <i>Antiq.</i>	XVII.	IX.	3
	Sailing of Archelaus to Rome	See Jos., <i>Antiq.</i>	XVII.	X.	1
	<i>Varus</i> president of Syria	See Jos., <i>Antiq.</i>	XVII.	X.	1
	Crucifixion of 2000 men	See Jos., <i>Antiq.</i>	XVII.	X.	10
	<i>Varus</i> president of Syria	See Jos., <i>Antiq.</i>	XVII.	XI.	1

As a glance at this prospectus will show that the ill-digested suggestion of Zumpt of a previous governorship of Quirinius cannot be substantiated, it is useless to enter into a fuller discussion of the subject. The governor under whom Jesus Christ was born was not "Cyrenius," but Saturninus, as acknowledged by Tertullian and other Christian writers. Whether, therefore, we are confronted with an intentional or unintentional error on the part of the evangelist or with an upright or downright blunder on the part of the first copyist, we do not find that an interpolation of a previous governorship of Cyrenius is either justifiable or feasible. It is useless to make it appear as if there had been a previous presidency of Syria administered by Quirinius either on a joint equality with Saturninus or in a subordinate position, because there was already an associate administrator in office with Saturninus in the person of Volumnius. To install P. Sulpicius Quirinius as governor of Syria at the time of the Nativity, would be to initiate a third governor of Syria at one and the same time, and that would be too much of a good thing.

So, however the facts of history may be misstated or perverted by would-be friends or declared enemies, the truth will emerge in one way or other after all. Supposing the text of Luke II. 1 to pertain rather to the anecdote of the boy Jesus when he was twelve years old than to the story of the child Jesus who was born at Bethlehem in fulfillment of Micah's prophecy and in pursuance to Caesar's decree, we obtain, in this adjustment of the biblical narrative, the only real and directly dictated *datum* for the true allignment of the life of Jesus. As we shall show in the discussion of the next serviceable test-case for probing the correctness of the Jewish calendar as reconstructed by us, the connection of the decree of Caesar Augustus, that all the world should be taxed, with the age of Jesus when He was twelve years old in the thirty-seventh year of the Actiac Era, or 9 A. D., represents the very pivot on which His life may be evenly balanced. For this conjunction with a cosmopolitan era makes this date a fixed point—an irrefragibly fixed point—from which we may reckon unerringly forward or backward, and establish without fail and without flaw either the beginning or the end of

the life of Jesus. Being concerned at present, only with the beginning, we deduce from this datum only the time-determination of His nativity. Since, on the fifteenth of Nisan, A. D. 9, Jesus was twelve years, three months and twenty days old, i.e. twelve solid years and the fraction of a year between the Passover and the preceding feast of Dedication, it follows as a matter of the commonest kind of mathematics that Jesus was born on the feast-day of Lights, or the first Christmas-day December twenty-fifth, J. P. 4709, or 5 B. C.

8. THE ANNUNCIATION TO ZACHARIAS, OF THE COURSE OF ABIA

In concluding the argument for the time-determination of the Nativity, we arrive at what Andrews denominates "the only direct datum which the Gospels give us" to determine "in what part of the year the Lord was born," viz. the statement of Luke (I.5) that Zacharias, the father of John the Baptist, "was of the course of Abia." "It is known," says he (*Life of Our Lord*, pp. 12-13) "that the priests were divided into twenty-four classes, each of which officiated at the temple in its turn for a week (1 Chron. 24: 1-19; but compare Neh. 12:1-7). This order, originally established by David, was broken up by the captivity. The four classes that returned from Babylon were divided anew by Ezra into twenty-four, to which the old names were given. Another interruption was made by the invasion of Antiochus, but the old order was restored by the Maccabees. Of these courses that of Jehoiarib was the first, that of Abia the eighth. We need, therefore, only to know a definite time at which any one of the courses was officiating to be able to trace the succession. Such a datum we find in the Talmudical statements, supported by Josephus, that at the destruction of the temple by Titus on the fifth [sixth] of August, 823 [Varro, or 70 A. D.], the first class had just entered on its course. Its period of service was from the evening of the fourth [fifth] of August, which was the Sabbath, to the evening of the following Sabbath, on the eleventh [twelfth] of August. We can now easily compute backward, and ascertain at what time in any given year each class was officiating."

This statement, however, requires a qualifying clause. While it is true that the course of Jehoiarib was about to enter on its tour of service at the time of the conflagration on the ninth of Lōus (or Ab), it is no less true that it had been on the point of doing so for at least two weeks. The truth is, the whole priesthood had been in a state of virtual suspension since the seven-

teenth of Panemus (or Tamuz) [of the sixteenth of July], when the daily sacrifice ceased for want of sacrifices; and in a state of actual separation from temple service from the twenty-fourth of Panemus [Tamuz] or the twenty-third of July, when "the beginning was made in burning the sanctuary," (Jos., *Wars* VI. IV. 5) first by the Jews, and then by the Romans. It is from this point, the real starting-point of discontinuance, that we must reckon backwards the periods of actual, uninterrupted service.

If, then, in agreement with the general plan of procedure, we compute, first, the number of days between the twenty-fourth of September, 6 B. C., the traditional equivalent of Hyperberetaeus or Tisri tenth, and the twenty-third of July, or Panemus twenty-fourth [Tamuz twenty-fourth], and then the amount between the twenty-fifth of Casleu or December twenty-second, 165 B. C. (exclus.), another starting-point of the resuscitated temple service, to the former start on September twenty-fourth or Tisri tenth, 6 B. C., we may reasonably expect to find the first link in the concatenation of dates which renders them one and all unimpeachably plausible and *per se* probable.

Reducing the seventy-four full years between 6 B. C. and 70 A. D. to days, and adding the 218 of 70 A. D. + the 98 of 6 B. C., we find that the total number, $(27344 - 14 =) 27330$, divided by 168 (the number of days in a priestly period or sacerdotal cycle), yields 162 cycles or revolutions of all twenty-four classes, and leaves a remainder of 114 days, which, divided by seven, will exhibit the number of weeks consumed by the courses following that of Abia and the remaining days of the week after the annunciation to Zacharias. Now 114 divided by seven proves conclusively that sixteen service weeks succeeded in the wake of the ministrations of Zacharias, that two days in the preceding service-week (Friday and Saturday) succeeded the day of ministration, and that, consequently, the day before these, Thursday, the twenty-fourth of September (6 B. C.), was historically as well as traditionally the day of the annunciation to Zacharias. The priest of the course of Abia, therefore, was, as claimed by canonical scripture and patristic literature, officiating in the temple and acting in the capacity of supreme pontiff, on the day specified, in the sixth year before the beginning of the Christian era, one year and three months (or 457 days) before Jesus, according to the almost catholic belief of Christian antiquity, was born on the twenty-fifth of December, 5 B. C. But how do the facts and figures of Jewish calculation compare with this result?

If we assume, on the authority of the same sources, that the twenty-fourth of September was, in 6 B. C., coincident with the tenth of Tisri or Hyperberetaeus, we have, beside the second half-year of Sel. 307, containing $177 - 10 = 167$ days, a total of

seventy-four lunar years of 354 days each, including four times seven embolismic months of thirty days each, plus twice one extra-intercalary or leap-year day in the first nineteen-year cycle of this period and thrice four days of "Badhu" in the three remaining cycles, and finally, in 70 A. D., the first three months and twenty-four days, which, with the addition of another extra-intercalary day in Sel. 382 (sacred), will sum up as follows (making allowance for the exception of the one intercalary month of 5 B. C., which had only twenty-nine days.)

Sel. 307	$\frac{1}{2}$ year 177—10	= 167 d.
Sel. 308—381	74 years of 354 ds.	= 26196 d.
	28 months of 30 ds.	= 840 d.
	14 days of "Badhu"	= 14 d.
Sel. 382	3 mos. and 24 days	113 d.
	1 day extra intercal.	1 d.

	27331
Error of one (1) d. in 5 B.C.—	1
	27330 days

The sum total of days, 27330 days, according to the Syro-Macedonian or Jewish calendar, being the same as in the computation by the Julian calendar, it is needless to repeat that the chronological outcome is also the same. We may therefore proceed to the calculation of the priestly courses between the great Day of Dedication inaugurated by Judas Maccabaeus on the twenty-fifth of Apelleus (or Casleu, Sel. 148) or December twenty-second, 165 B. C., and the great day of Atonement, the tenth day of Tisri or Hyperberetaeus, Sel. 307, or September twenty-fourth, 6 B. C., when the annunciation to Zacharias occurred in due course of ministration in the temple.

Since the whole number of days contained in the period which we have termed the Jewish-Roman or the Asmonean-Herodian Era has been shown to have been 85330, and the number from the announcement of the coming of John, the forerunner of Christ, to the beginning of the burning of the temple has been found to be 27330, we may, by subtracting the latter from [85330—14=] 85316, obtain the number of days contained in the interval between the Maccabean starting-point and the standpoint of Zacharias in the course of regular service. But before we begin with the actual computation of this term, we must remove an impression and a consequent prejudice created by a misleading statement of Josephus and corroborated by equally misleading repetitions of it by later commentators and chronologists.

The only partially true statement of Josephus referred to is this (see *Antiq.* B. VII. C XIV. §7): "He [i.e. David] divided them [i.e. the priests] also into courses; and when he had separated the

priests from them, he found of these priests twenty-four courses, sixteen of the house of Eleazar, and eight of that of Ithamar; . . . *and this partition hath remained to this day.*" Now, while it is true that the partition and distribution of the priesthood as described reached down to the very day in which Josephus lived, it is not a fact that it extended in the same form and in the same fashion from David to Josephus. It did so only from a certain point previous to the life-time of Josephus, and of Jesus, and of John the Baptist, while, for a long period of time, before John and Jesus and Josephus, another order and arrangement prevailed which was very distinct and different from that ordained by David. There would be nothing gained by trying to explain away the manifest discrepancy in the number as well as the patent diversity in the enumeration of the priestly courses as they existed under Ezra and Nehemiah. On the contrary, we should only fail to discover the truth and lose the satisfaction which only an appropriation of the truth can confer. We shall therefore turn to the perusal of another passage of Josephus, which, in all probability, will disclose the facts as they were, and reveal the tide of events as they ebbed and flowed through the years.

As the burning of the cloisters of the temple put an effectual stop to the ministrations of the priestly courses, so the completion of the building of these very same cloisters gave occasion to the rearrangement and reclassification of the priesthood which was to continue throughout the life-time of John and Jesus and "remain" to the day when Josephus mourned their ultimate cessation. In his *Antiquities* (B. XV. C. XI. §5) the historian relates how king Herod contrived three enclosures about the temple, but, not being a priest, entered into none of them himself. "However, he took care of the cloisters and the outer enclosures; and these be built *in EIGHT years.*" If, then, subtracting these eight years from 18 B. C., we assign the completion of the cloisters to the close of 11 B. C. or the beginning of 10 B. C., or else protruding the beginning of the revived Davidic order of twenty-four courses some ten revolutions or (which is nearly their equivalent) some five years ahead of the recognized standpoint of Zacharias, we obtain, in this way also, the close of 11 B. C. or the beginning of 10 B. C. as the breaking-point in the line of sacerdotal succession. If then, in the first place, we add ($168 \times 10 =$) 1680 days to the duration of the "twice-twelve course" series of 27330 days together with the forty-nine days of the seven preceding courses and the five days of that of Abijah, and deduct the sum of 29064 from the sum total of priestly service days ($85316 - 29064$), we obtain the number of days (56252) in the Asmonean-Herodian period allotted to the temple service in priestly periods of ($22 \times 7 =$) 164 days each. The number 56252 or 343×164 (without a remainder),

represents the period from December twenty-second, 165 B. C., to December twenty-sixth, 11 B. C., or, translated into the terms of the Jewish calendar, from Casleu twenty-fifth, Sel. 148, to Casleu nineteenth, Sel. 303. The date of the change or alteration in the arrangement of holy orders being thus clearly defined, we may proceed next to calculate, or rather simply restate, the chronological position of the course of Abia and of the acting high-priest Zacharias in the year 6 B. C. The number of 343 courses of 164 days each being 56252, that of ten courses of 168 days 1680, and that of the first eight courses of the current cycle (including the full service week of Zacharias) being fifty-six, we have in this period the sum of 57988 days, the exact number of days, according to the Julian calendar, between the twenty-second of December, 165 B. C., and the twenty-sixth of September, 6 B. C. This last named date was the last day of the week during which Zacharias, of the course of Abia, officiated or ministered in the temple. The last two days, the twenty-fifth and the twenty-sixth of September, were the Friday and Saturday of his regular service week. Consequently, with the Thursday of this week, we arrive again at the twenty-fourth of September, 6 B. C., or the tenth of Tisri or Hyperberetaeus, Sel. 307, now doubly established as the day of the angelic annunciation to Zacharias of the conception of his son, the future John the Baptist, and, more to our purpose, as one of the four interlocked and concatenated dates of the natal year of John and Jesus Christ, which it is now our privilege to point out and hold up to the world as the well-authenticated, genuine date of the Nativity.

This, the date of Christmas or the Birthday of Jesus Christ, being the all-important objective of this last argument on the subject, there remains only the bare need of restating the facts already established that, being interlinked and welded together, not so much by the traditional terms of the Julian calendar (by which they are best known and familiar) as by the ritual and liturgical phraseology of the Jewish ephemeris, the four ecclesiastical dates perpetuating the memory of the two announcements and the two arrivals of John and Jesus are so inseparably settled and established in their places that, like the four cardinal points of the year, near which they are located, neither one of them nor all of them together can be removed from the site.

If, then, the first of this quadrangular synchronization of dates; the announcement of John the Baptist's coming into the world, has been proven to be inseparably connected with the Fast-day of the Atonement on the tenth of Tisri or the twenty-fourth of September, 6 B. C., then the second date and event, the annunciation to Mary, followed in the "sixth month" (Luke I. 26), in indissoluble conjunction with the Feast of the Passover,

on the fifteenth of Nisan or the twenty-fifth of March, 5 B. C.; then, too, the third date and event, the birth of John, succeeded in inseparable union with the fast-day of Tamuz, nine months after the first, on the seventeenth of Tamuz or the twenty-fourth of June, 5 B. C.; and then, too, the fourth date and event, the birth of Jesus, "the greatest event of history," followed in indissoluble association with the joyous feast of Lights or Illumination, fifteen months after the first and nine months after the second, on the twenty-fifth day of Casleu, Sel. 308, or the twenty-fifth of December, 5 B. C. The much disputed date of the Birthday of Jesus has then been demonstrated not only to be a well authenticated time-determination in itself, but a very suitable and decisive test-case for the probing of the Jewish calendar as discovered and reconstructed in this essay.

And having, as we believe, acquitted ourselves of the task of verifying this date before trying it out as a test-case, we feel that we are here and now justified in applying to it—the date of Christmas itself—the principles of a probe of calendar composition. So, then: How does the twenty-fifth of December, 5 B. C., comport with the postulate that it shall, without juggling or legerdemain, coincide with the twenty-fifth of Apelleus or Casleu, and, at the same time, shall be a Jewish Sabbath or Gentile Saturn's day?

We have before this presented a comprehensive prospectus of diminutive problems in arithmetic, working out the chronological location of the Feast of Dedication or Illumination both in the serial line of days contained in the Jewish Roman or Asmonean-Herodian Era and in the Julianized Roman year corresponding to each Seleucic year during the decade 7 B. C. to 3 A. D. We have there not anticipated the reason for the identification of Christ's birthday with the feast-day of Lights, but now, since we have demonstrated the equation of the Annunciation to Zacharias with the great fast of the Atonement on the tenth of Tisri, it is time that we should point out how well the Nativity on the twenty-fifth of December corresponds to the twenty-fifth of Apelleus or Casleu. As we have already remarked, the day of the Nativity occurs some fifteen months after the Annunciation to Zacharias, or nine months after the Annunciation to Mary. Translated into days, this means that Jesus was born exactly 457 days after the angel's message to Zacharias and 275 days after the angelic mission to His mother. If, then, by way of experiment, we adopted the erroneous system of dominical letters projected into the past, and, in applying it, made 5 B. C. a bis-sextile or leap-year (thereby injecting an extraordinary day into the calendar without a corresponding day of "Badhu" in the Jewish calendar to offset it), we should find that the dates at the

following cardinal point, to wit, the fifteenth of Nisan (or Xanthicus) and the twenty-fifth of March, would be dislodged and effectually dislocated; for 168 days in Sel. 307 plus fifteen days in Sel. 308 equal 183 days, and ninety-nine days in 6 B. C. plus $(84+1=)$ eighty-five days in 5 B. C. amounts to 184 days. We must, therefore, reject the system of Sunday letters which would introduce the error of a leap-year day (or any other imaginary day) and the consequent sin of separating what God hath joined together.

On the other hand, if we adhered to the general rule that the nineteen-year lunar cycle required the intercalation of thirty days in the third year of its duration, in *this* case, as well as in any other, we should find, either that we disjointed the Jewish and Julian dates which define the Annunciation to Mary, or that we disconnected the two descriptions of time which designate the Nativity: for $(177-15=)$ $162+30+84=276$ days, while $359-84=275$ days. We see, therefore, that the figures in the Jewish calendar must be $162+29+84=275$ days.

We observed in the beginning of our survey of the Asmonean-Herodian Era, in disposing its days into Calippic periods and Metonic cycles, that there was an excess of one day in one of these, which, if retained, would frustrate or destroy the sabbatization of the Era. We pointed out that it was probably the Vth Calippic Period (and probably the second nineteen-year cycle of that period) which held within its scope a lunar year which postulated an intercalation of only twenty-nine days instead of thirty, and that, most probably, in this Vth Calippic Period, it was the third year of the second nineteen-year cycle, that demanded the lapse of one day, due to an unavoidable accident or to deliberate pontifical action. We now know that the discrepancy does lie here, and that, instead of being a detriment, it is an advantage to the cause of reconstructing the Jewish calendar. With the aid of this "loss" we can now positively determine the year of the Nativity, since the calendric conditions needed to comply with this characteristic are to be found only in this year, and no other.

The other characteristic or distinctive feature of the natal day of Jesus is this, that it should be coincident with a Sabbath or Saturn's day. The figures of our computation (see p. 455) declare the day to have been the seventh day of the week, for 58443 divided by seven yields 8349 seven-day periods without a remainder. But supposing that Jesus, in the days of His flesh, had been demanded by the Pharisees or some other foes to prove that He had been born on a Sabbath, in what way would He have satisfied His inquisitors as to the week-day character of His birthday? Very simply, by an appeal to the certificate of His

circumcision in the Temple. If anyone knew of a case of circumcision on the Sabbath, in violation of the Sabbatarianism then in vogue, Jesus did; His own experience in infancy being a constant testimonial to the fact. But if He was indeed circumcised "*on the eighth day*" (which was a Sabbath, cf. John 7:22), the octave of His circumcision, which was His natal day, was also a Sabbath, and so it must appear in every scheme of calendar construction professing to be a reproduction of the Jewish yearbook of that age.

With these conditions and postulates of the case before us, let us review the situation as developed to this point. We repeat, in the first place, that the Christian feast of the Nativity (or Christmas) coincided with the twenty-fifth of Casleu (or Apelleus), not because the twenty-fifth of December was known beforehand as a feast or holiday, but, on the contrary, the twenty-fifth of December became known afterward as a feast-day because the twenty-fifth of Apelleus was a Jewish holiday for over a century and a half before this, being the 275th day after the fifteenth of Nisan or Xanthicus, which also was a holiday predetermined by the Jewish calendar, 182 days after the tenth of Tisri, Sel. 307, or September twenty-fourth, 6 B. C. Since, then, the date of the Nativity, as the 275th day of the natural gestation period, makes Nisan fifteenth or March twenty-fifth the first day of it, and this, the day of Incarnation is always 182 days after the tenth of Tisri, which we have synchronized with September twenty-fourth, 6 B. C., it follows that the stabilization of Christmas is not dependant on the cardinal points of the natural year, but on the ritual and liturgical return of the great Jewish feasts of Atonement, Passover, and Dedication, as they happened to occur at that time. In the same manner, the week-day character of Christmas on the twenty-fifth of Casleu and the twenty-fifth of December is said to be a Sabbath or Saturday, not because it is fitting and appropriate that so great an event should happen on so great a day, but because, in the course of the natural revolution of seven-day periods, the fact occurred on the 58443rd day after the first inauguration of the Feast of Lights, when, exactly 160 years or 8349 weeks before the Nativity, the luminous feast was introduced by Judas Maccabaeus. Both coincidences combine to refute the assertion made even by Christian clergymen and chronologists that the Feast of the Nativity was primarily built on the turning point of light at the winter solstice, or that it was founded on the background of a heathenish festival like the Saturnalia or the high-time of a Mithraic feast. True, the *Praenestine Almanac*, which was used contemporarily with the "greatest event of history," declares without a doubt that the winter solstice was on the twenty-fifth of December, coincident

with the date of Christmas. But the reason for this noteworthy coincidence was not a working together with the almanac of Nature, but a cooperation with the Calendar then in use by the Jews, which located the Paschal Feast that year on the twenty-fifth of March and the feast of Lights on December twenty-fifth, in accordance with the regular revolution and normal order of the Calippic Cycle. As a word spoken in due season (or, as expressed in the original, *Prov.* XV. 23), "a word on the wheels," is such because of the facility with which it makes its way to the heart (Robert Hall), so the Word was made flesh, at the proper rotation of the cycles, "in due season," not because the cardinal points of the year were data divinely aimed at, but because the wheels of destiny, the cycles of time, delay in this particular year at these points to deliver the events which have since, in consequence, made both famous.

It may be considered, moreover, that, if the Nativity (which cannot be severed from the Hebrew feast of Lights) had occurred in any other year, its date might be far removed from the winter solstice or the time of Gentile festivities, but never from the 275th day after the Passover celebration. But being, as it is, bound up with the 160th anniversary and the 8349th octaviation of the inaugural Sabbath-day of the Dedication in 165 B. C., there is no possibility of separating the component parts of this remarkable crystalization of chronology. Calculated forward from the twenty-fifth of Casleu, Sel. 148, or December twenty-second, 165 B. C., or backward from the ninth of Ab, Sel. 382, or August sixth, 70 A. D., the Feast of Lights, at which Jesus Christ was born, is flawlessly distinguished by its Sabbatic character; thus: $58443 \div 7 = 8349$, or $26887 \div 7 = 3841$, in both ways of reckoning without a remainder. We are therefore justified in regarding the date of the birth of Jesus Christ, as on Apelleus or Casleu twenty-fifth or December twenty-fifth, J. P. 4709 or 5 B. C., as one of the best attested dates of Jewish history, in fact, as the perfectly impregnable acropolis of Jewish-Christian chronology.

On the other hand, we beg leave to observe that, if He that was born King of the Jews at this time had been born in any other year of this ten-year natal period, this week-day character of that imaginary birthday would not have complied with this sabbatarian requirement or postulate. Thus, if Jesus had been born in 7 B. C. His birthday (according to the Jewish calendar on Casleu twenty-fifth), would have fallen on Wednesday, the eighteenth of December, thus:

if in 7 B.C., on Wednesday, Dec. 18th;
 if in 6 B.C., on Monday Dec. 7th;

if in 4 B.C., on Thursday, Dec. 15th;
 if in 3 B.C., on Monday, Dec. 4th;
 if in 2 B.C., on Sunday, Dec. 22nd;
 if in 1 B.C., on Thursday, Dec. 11th;
 if in 1 A.D., on Wednesday, Dec. 30th;
 if in 2 A.D., on Sunday, Dec. 19th;
 if in 3 A.D., on Thursday, Dec. 7th;

Accordingly, to coincide with a Sabbath or Saturday, His birth could have happened only in 5 B. C.

In still another, but similar manner, we might, by this additional process of elimination, elicit the fact that only the year 744 of the Nabonassan Era, which is equivalent to J. P. 4709 or 5 B. C., is capable of producing the corresponding coincidence required by Egyptian chronography. According to the *Acts of the Council of Ephesus* (A. D. 431), and in particular in accord with a sermon preached by Paul, the bishop of Emesa, at Alexandria, "for the birth of our Lord and Saviour Jesus Christ" and also in agreement with the work of Cosmas Indicopleustes, a Nestorian writer of the sixth century, the festival of the Nativity was observed by all parties and factions of the Christian Church on the twenty-eighth of Choiac, the 118th day of the Julianized Egyptian year. This is synonymous with Apelleus or Casleu twenty-fifth in the Jewish year, and with December twenty-fifth in the Julianized Roman calendar. The question, therefore, is in order. When was the twenty-eighth of Choiac contemporary with the twenty-fifth of Casleu and the twenty-fifth of December, or, vice versa, when was the twenty-fifth of Casleu coincident with the twenty-eighth of Choiac? We submit the following prospectus of Christmas days as they occurred during the decade of nativities.

Sel. 306, Casleu	25 ..	Choiac 21, Nab. 742 ..	Dec. 18, 7 B.C.
Sel. 307, Casleu	25 ..	Choiac 21, Nab. 743 ..	Dec. 7, 6 B.C.
Sel. 308, Casleu	25 ..	Choiac 28, Nab. 744 ..	Dec. 25, 5 B.C.
Sel. 309, Casleu	25 ..	Choiac, 18, Nab. 745 ..	Dec. 15, 4 B.C.
Sel. 310, Casleu	25 ..	Choiac, 7, Nab. 746 ..	Dec. 4, 3 B.C.
Sel. 311, Casleu	25 ..	Choiac 25, Nab. 747 ..	Dec. 22, 2 B.C.
Sel. 312, Casleu	25 ..	Choiac 14, Nab. 748 ..	Dec. 11, 1 B.C.
Sel. 313, Casleu	25 ..	Tubi 3, Nab. 749 ..	Dec. 30, 1 A.D.
Sel. 314, Casleu	25 ..	Choiac 22, Nab. 750 ..	Dec. 19, 2 A.D.
Sel. 315, Casleu	25 ..	Choiac 10, Nab. 751 ..	Dec. 7, 3 A.D.

Now, so far as we are able to discern, there is only one year remarkable for its conformity to the conditions and requirements of the true Nativity date, and that is the year of Nabonassar 744, or, as we reckon it, 5 B. C. It is, therefore, needless to expatiate on the particular inaptitude of any one of the other dates sug-

gested for the Nativity. Sufficient that, by this thorough-going elimination of all possible alternatives the solitariness and uniqueness of the historically established and traditionally sanctioned date of the Nativity is enhanced with the force of a divine fiat. Stripped of all features of comparison and contrast, relieved of all elements of false derivation and origination, and endowed with the attributes of real truth and historicity, the birthday of Jesus stands forth as a shining example of what may be expected of the reconstructed and reconditioned constitution of the Jewish or Syro-Macedonian Calendar. We may now, with renewed confidence, refer to the ten years from 7 B. C. to 3 A. D., which have all been considered natal possibilities by one chronologist or another, in the words of the Master: "Were there not ten cleansed? but where are the nine? There are not found that returned to give glory to God, save this stranger." And, addressing ourselves to the spirit of Christmas, as if it were a living soul, we may triumphantly say: Arise, go on thy way around the world: thy faithfulness and fidelity to truth hath made thee whole.

We cannot, however, conclude this chapter (long as it is) without paying our respects to the variant of this Christmas date, which, because of its historicity, is really entitled to preeminence and actual preference over the theoretical and traditional date. We refer to the misconstrued form of Caesar's Reformed Calendar as it obtained during the first ($36 + 12 =$) forty-eight years of its existence. As we have pointed out before this (cf. the consular year of Censorinus and Gallus, J. P. 4706 or 7 B. C.), the calendar of Julius Caesar was disfigured through a misunderstanding and misapplication of the law of intercalation. Instead of bissextiling every *fourth* year (exclusive of the preceding fourth year,) the priests in charge of calendric time-keeping inserted a leap-year day every *fourth* year inclusive of the preceding leap-year, thus rendering every *third* year in consecutive order a bissextiled year and increasing the number of intercalations during the first thirty-eight years of its adoption to twelve instead of only nine. To offset this error, upon its discovery, which happened according to the chronographer Censorinus (*De Die Nat. C. XXII*) at the close of the twentieth year of the era of Augustus (consequently shortly before the sixteenth of January, 7 B. C.), and shortly after the consuls Marcius Censorinus and Asinius Gallus had entered upon their office (January first, 7 B. C.), "Augustus ordered", according to the account of Macrobius, "that the next twelve years should pass without any intercalation, and that afterward, according to the arrangement of Caesar, the intercalation should be made at the beginning of the fifth year." (including both extremes) In other words, says Solinus, "he ordered twelve years to run on without intercalation, so that restitution might thus be made of

the three days which had been inconsiderately intercalated beyond the nine." Now, since this error, already great, is still further aggravated by modern chronologists by the introduction of Caesar's calendar with an error and the consequent aberration of every point of intercalation by a year, it is obviously important that we should get the situation outlined as it actually developed during the thirty-eight years of the calendar's evolution.

When the error of three days' excess intercalation was discovered shortly before the twentieth year of Augustan glory came to a close on January sixteenth, 7 B. C., the thirteenth interpolation of the bissextile in February was just impending. The thirteen spurious intercalations, as they are up to this day inflicted on this ill-starred period by modern chronologists (see, for instance, Prof. Totten's *Our Race*, No. 14, p. 69), are arranged as follows: 45, 42, 39, 36, 33, 30, 27, 24, 21, 18, 15, 12, 9 B. C. The order in which they actually occurred, was the following: 43, 40, 37, 34, 31, 28, 25, 22, 19, 16, 13, 10 B. C. A thirteenth mistake in intercalation did not occur, since the error of bissextiling the ensuing year (7 B. C.) was recognized in time to be prevented. The Pontifex Maximus, Augustus, accordingly ordered the following twelve years to remain immune to leap-year intercalation by allowing the following years to be exempt: 6 B. C., 2 B. C., and 3 A. D. The whole line-up of legitimate leap years should, therefore, have exhibited a series like this: 42, 38, 34, 30, 26, 22, 18, 14, 10, [6], [2 B. C.], and [3 A. D.], 7 A. D., 11 A. D., etc., etc. The reasons are apparent. In this natural arrangement, the initial year of the Julian calendar system is not inaugurated with an error and the year of the Nativity, J. P. 4709 or 5 B. C., is not disqualified as such by the injection of an uncalled for leap-year day which would only serve to disturb its inner arrangement. As it is here presented, it comports perfectly with all the postulates of history and tradition.

If, then, we accept this disposition as a correct reproduction of the *deformed* Julian calendar as it appeared up to the time of its re-reformation by Augustus Caesar, we may reconstruct this piece of time-keeping in this manner. Since all three of the supernumerary leap-year days were included in the number of days contained in the thirty-eight years from 45 to 8 B. C. (inclusive), the addition of these three intercalary days gives to the over-intercalated calendar the appearance of being earlier than the theoretical arrangement of the Julian Period, whereas, as a matter of fact, the earlier date is really crowded back by the unlawful introduction of the three bissextile days. In other words, while we have designated the ninetieth day of J. P. 4707 or 7 B. C. as the 57443rd day of the Asmonean-Herodian Era, the eighty-seventh [$90 - 3 = 87$] day of the deformed calendar for 7 B. C. is

not the 57440th day, but the 57443rd of the Era equally as well as the ninetieth day of the hypothetical ephemeris. That is to say, the same day, having two descriptions, accordingly as it is calculated with more or less addenda, has two designations which sound exactly alike and seem to be one and the same, just as, after the Gregorian reformation of the calendar, each day was differently designated either as of *OLD style* or of *NEW style*, with only this difference, that, in 1582 and a long time after, both definitions were used simultaneously, while in 45 to 7 B. C., only one, the erroneous one, was in use.

If, then, we transfer the three supernumerary leap-year days from the later to the earlier part of the deformed calendar period by mentally adding these three intercalary days to the days gone before, and by deducting three from the ninety days of 7 B. C., which we have equated (p. 386) with the last ninety days of the Jewish-Roman or Asmonean-Herodian Era, we have the duplex equation to work from: 57443..87..90 ds.

	<i>Jewish—Julian</i>	<i>Calendar—</i>	<i>Deformed</i>	<i>Reformed.</i>
57443	57443 .. [90-3=] 87	87	87	F 90
1		30	1	1
261	1. Sel. 306 = { 30 1 324 }	30 1 324 } d. in 306	261	261
7)57705		442	349 =	352 =
8243+4		-365 d. in 7 B.C.	Wed., Dec. 15	Wed., Dec. 18
57798	57798 ..	77	77	80
1		30	1	ED 1
261	2. Sel. 307 = { 03 1 324 }	1 324 } d. in 307	261	261
7)58060		432	B 339 =	342 =
8294+2		-365 d. in 6 B.C.	Mon., Dec. 5	Mon., Dec. 7
58153	58153 ..	67	67	69
29!		177	29!	C 29!
261	3. Sel. 308 = { 177 29 177 }	29! 177 } d. in 308	261	261
7)58443		450	357 =	359 =
8349+0		-365 d. in 5 B.C.	A Sat., Dec. 23	Sat., Dec. 25
58536	58536 ..	85	85	87
1		30	1	B 1
261	4. Sel. 309 = { 30 1 324 }	1 324 } d. in 309	261	261
7)58798		440	G Thurs., Dec. 13	Thurs., Dec. 13
8399+5		-365 d. in 4 B.C.	75 30 261	A 77 30 261

	<i>Jewish—Julian</i>	<i>Calendar—</i>	<i>Deformed</i>	<i>Reformed.</i>
58891	58891 ..	459	366 =	368 =
30		-365 d. in 3 B.C.	360	
261	5. Sel. 310 = { 177	94	Wed., Jan. 1	Wed., Jan. 8
7)59182	30	177 { d. in 311	= 1 =	
8454 + 4	177	177	94	96
59275	59245 ..	448	261	GF 261
261	6. Sel. 311 = { 177 } 354	-365 d. in 2 B.C.	355 =	357 =
7)59536	177	83	Sun., Dec. 21	Sun., Dec. 22
8505 + 1		354 d. in 312		
59629	59629 ..	437	83	E 84
261	7. Sel. 312 = 354	-365 d. in 1 B.C.	261	261
7)59890		72	344 =	345 =
8555 + 5		177 { d. in 313	D Thurs., Dec. 10	Thurs., Dec. 11
59983	59983 ..	30	72	D 73
30		177	30	30
261	8. Sel. 313 = { 177 }	456	261	D 261
7)60274		-365 d. in 1 A.D.	363 =	364 =
8610 + 4		91	C Wed., Dec. 29	Wed., Dec. 30
60367	60367 ..	354 d. in 314		
261	9. Sel. 314 = 354	445	91	C 92
7)60628		-365 d. in 2 A.D.	261	261
8661 + 1		80	352 =	353 =
60721	60721 ..	354 d. in 315	B Sun., Dec. 18	Sun., Dec. 19
261	10. Sel. 315 = 354	434	80	81
7)60982			261	BA 261
8711 + 5		-365 d. in 3 A.D.	A 341 =	342 =
61075		69	Thurs., Dec. 7	Thurs., Dec. 7
			69	69 =
				Sat., Mar. 10

With this prospectus before us, the result of the slightest scrutiny will be twofold: therefore doubly instructive and interesting. On the one hand, we shall see how and why only one year, J. P. 4709 or 5 B. C., can be esteemed the date of the Nativity, and on the other, how and why none of the other years of this ten-year period can possibly be considered the date of that event. As this isolated twelvemonth alone can be regarded as complying with the calendric conditions of the case, it matters not in what terms we commit this fact to writing, whether we state it in terms of the only form of the Julian calendar then in

use, the deformed or misconstrued, or in terms of the re-reformed calendar as reconstructed by Augustus Caesar and Pope Gregory, and as used, in reversed theoretical form, by us to-day. For whether it is matched with the misshapen body of the truly historical time-determination as it appeared in hideous reality in consequence of the blundering excesses of intercalation, or mated in the beauty of holiness with the hypothetical form of the Gregorian calendar in the evolution of time, the same 58443rd day of the Asmonean-Herodian Era stands forth as the twenty-third of December (*old* style) and as the twenty-fifth of December (*NEW* style). As a unit and isolated element of time, it is any-way and always identical with the twenty-fifth of Apelleus or Casleu, and, as such, we now take note of it in the task of reconstructing the Hebrew calendar of the times. As a test-case of unimpeachable character it must find ungrudging admission into every essay undertaken to establish the life-time of Jesus and with it the structure of the Jewish calendar. There is nothing to be added or stressed as to the veracity of either form of dating; all that remains to be said refers to the preferential employment of one or the other form.

It is obvious that, since both forms of notation cannot be continued side by side, and both are not equally liable to misunderstanding, it is a matter of expediency and convenience to prefer the form least liable to error. This consideration alone would dictate the choice of the modern shape of the Julian calendar, which, when reversed to those ancient days, affords an instrument of time-determination less subject to misinterpretation than the admittedly faulty and mistaken structure of the deformed Julian calendar. And since the theoretical form of the Julian calendar, as joined to the approved Julian Period, is hallowed by the associations of centuries, stressed by the age-old observance of Christmas as a firmly established *official* holiday of church and state, the definition of the theoretical, re-reformed calendar, "the twenty-fifth of December," seems destined to be linked forever, as in holy wedlock, with the holy event, so that there seems hardly a chance for an alteration or change in the manner of dating, even if such were desired. As in the case of George Washington, the first and best beloved president of the United States, who personally retained a predilection for the eleventh of February (*old* style), as the real day of his birth, in preference to the twenty-second of the month (*new* style), though officially set aside by Congress and accepted by the people as a legal holiday, so let it be in the instance of the Nativity of Jesus Christ. Let those who will observe in historical consistency and religious sentiment, *the twenty-third of December* as the actual day of the Nativity, but let *the twenty-fifth of December* also stand

as the *ideal* anniversary of His birth on the twenty-fifth of Apelleus or Casleu, the Hebrew garb of actuality.

And so, without another word of comment, we shall now proceed to the next historical date enumerated as a test-case for the trying out of the Jewish calendar as reclaimed and reconstructed in this book.

VOLUME IV. CHAPTER II

THE PASSOVER "WHEN JESUS WAS TWELVE YEARS OLD."

Though less accentuated and far less celebrated than the preceding date of the Nativity, the time-determination of the Passover attended by Jesus "when He was twelve years old" looms up before us even more replete with possibilities of proof and altogether convincing power than the immortal Birth Day which, like a bright and morning star, has blazed the way through the chronological heavens and has stood now for over 1938 years over the spot where the young child was. Scarcely observed by the experts and specialists on time, and utilized practically by none, the date supplied by this boyhood Paschal Feast has potentialities of evidential value little short of marvellous, which, bearing on the limitation of His life as well as on the delineation of the calendar then in use, serve the double purpose of fixing both. We shall now attempt to set them forth.

The singular grandeur of this great event from the juvenile days of Jesus Christ has been recognized by very few. The late Henry Ward Beecher has distinguished himself from the crowd of commonplace commentators by his picturesque estimate of it. "This first visit to Jerusalem," says he (*Life of Jesus the Christ*, p. 70), "stands up in his childhood as Mount Tabor rises from the plain,—the one solitary point of definite record." Similarly, in massive solidarity and in monumental symmetry, this event will be seen to rise unequalled. It will tower high above the plain of lesser dates, and, like a giant pedestal, will hold aloft, in perfect equipoise, the entire lease and tenure of His life: His life, that lease of

Majesty, so like a massy wheel,
Fixed on the summit of the highest mount,
To whose huge spokes ten thousand lesser things
Are mortis'd and adjoined.

The ascension, however, of this mountain pivot is not possible until a rank growth of scrubby underbrush has been cleared out of the way and removed from the approach. A great deal of this rubbish need never have been there, but it was planted there by the enemy.

The obstructionist rubbish deposited in the way of the investigator is the multitude of uncalled-for interpretations of this incident in the life of Jesus. Every conceivable incentive, every imaginable motive (except the right one), is dragged into the comment. For an exemplar horror of horrors take the almost complete summary of Canon Farrar. He says (*Life of Christ*, C. VI, p. 35): "The age of *twelve years* was a critical age for a Jewish boy. It was the age at which, according to Jewish legend, Moses had left the house of Pharaoh's daughter; and Samuel had heard the Voice which summoned him to the prophetic office; and Solomon had given the judgment which first revealed his possession of wisdom; and Josiah had first dreamed of his great reform. At this age a boy of whatever rank was obliged, by the injunction of the Rabbis and the custom of his nation, to *learn a trade* for his own support. At this age he was so far emancipated from parental authority that his parents could no longer sell him as a slave. At this age he became a *ben-hat-torah*, or 'Son of the Law.' Up to this age he was called *katon*, or 'little'; henceforth he was *gadol*, or 'grown up,' and was treated more as a man; henceforth, too, he began to wear the tephillin, or 'phylacteries,' and was presented by his father in the synagogue on a Sabbath, which was called from this circumstance the shabbath tephillin. Nay, more, according to one Rabbinical treatise, the *Sepher-Gilgulim*, up to this age, a boy only possessed the *nephesh*, or animal life; but henceforth he began to acquire the *ruach*, or spirit, which, if his life were virtuous, would develop, at the age of twenty, into the *nishema*, or reasonable soul."

Now, one would naturally suppose that the Gospel narrative was plain and simple enough, purporting, in great singleness of mind, to relate a thing that happened, not in connection with an ordinary circumstance, such as advertising for a trade or technician's job or publishing the age or stage of a boy's development, but rather a thing outside of the trend and tendency of natural evolution. One would imagine that anyone could see that Luke related his story, not because the thing that happened was wont to happen as a rule or in consequence of a law of nature *at the age of twelve*, but because it happened in spite of the fact that Jesus was only *twelve*, and then in contravention to the usual current of thought or expectation. Instead of taking Luke's story at its face value a story of the marvellous, though not of the miraculous,—the majority of commentators and composers of Christ's Lives construe this narrative into a tale of the commonplace, the trite and worn. Some bring in the phases of physical development (or the maturing of the body), and some the phenomena of psychical growth (or the experiences of the soul); but few, very few, supply the moving cause or the motif which

prompted him to pen this episode of that philosophical effulgence of the intellect which proved Him to be developed far in advance of His age and education, and endowed with the qualifications of a leader and ruler.

In order to be convinced that Luke was not confined or tied down to the *twelfth* year of Jesus by any habit of His parents or any custom of His nation, still less by any degree of bodily growth or corporeal maturity, let us review a few of the comments of famous authors of so-called Lives of Christ. They might be classified, if it were worth while, but they are hardly deserving of so much consideration.

That Strauss, a professedly rationalistic critic, should, in perfect consistency with his principle of interpretation, assign the accession of Jesus to the age of discretion *at twelve* on the strength of traditional similitude, is not astonishing, but to find that even orthodox doctors of divinity assert the same thing, is perplexing, if not embarrassing. Anyone—he need not be a D. D.—should have recognized that if such parallelism prevailed, some anecdote should have been recorded of Jesus at the age of forty, as of David, or at the age of eighty, as of Moses. But no! these Christian biographers insist on impressing some one or other corporeal characteristic on this picture of the youthful Christ as if that had been the occasion of His going up to Jerusalem. Thus Neander discovers *at twelve* the dividing line between childhood and youth, and Ellicott “the age of commencing puberty.” Geo. W. Clark (*Harmony of the Gospels*, p. 248) is not so sure of this line of demarcation. He says: “Puberty was not considered as actually attained till the completion of the *thirteenth* year. Possibly, Jesus attended the Passover ‘as a partaker in some preparatory rite which ancient custom might have associated with the age of commencing puberty.’” While according to Sells (*Bible Studies in the Life of Christ*, pp. 17–18) “the Jewish child ceased to be regarded as a child and could participate in the higher sacred institutions of the nation,” Cunningham Geikie (*Life of Christ*, pp. 213–14) is full of contradictions and impossible compromises. On the authority of Burckhardt and Winer, he repeats the assertion that “even in our own day, children in Palestine are so early matured that marriages of boys of *thirteen* and girls of eleven are not unknown,” and then reiterates the traditional dictum of Philo of Alexandria: “*At seven* a man is a logician and grammarian; at *fourteen* mature, because able to be the father of a being like himself, while, *at twenty-one*, growth and bloom are over.” But the climax is crowned with a cap of jingling bells by a lecturer and professor of psycho-analysis, Prof. Georges Berguer (*Some Aspects of the Life of Jesus*, pp. 142–9). “Jesus,” says he, “was *twelve* years old. In the Oriental countries this age corre-

sponds to a more advanced period of physical development than with us. It is about the age of puberty, when the child becomes or is about to become an adult. It is the period of physical and psychic disturbances, the springtime of the soul, what the English call *the storm and stress period*."

What has all this to do with Jesus of Nazareth? Is the physical development of Jesus a matter of demonstration in this narrative? Is the psychical perfection of Jesus a matter of speculation or a point that must be proven by the text or other context? Is an accretion in erudition or in edification to be gained by the evidence that Jesus was, *when twelve years old*, amenable to the rights of manhood or the rites of matrimony? What significance could ritual seal or ceremonial symbol have in the life of Him to whom the other sex had but a nominal or negligible existence? What pertinence, then, has the corporeal condition of the boy Jesus to the introduction of this anecdote in the narrative of Luke?

But the blind leaders of the blind proceed from bad to worse. In trying to avoid impediments and obstacles on the one hand, they plunge into a thicket of thorns and thistles on the other. A veritable jungle of natural undergrowth would be formidable enough, but when it is reinforced by an artificial labyrinth of barbed wire entanglements, the combined obstruction of theoretical and fantastic interpretation becomes almost insurmountable. Just look at this conclutteration of comments! Dr. Wieseler says (*Synopsis of the Four Gospels*, p. 159): Jesus became, when a boy of *twelve* years old, "a full-grown member of the theocratic community," although a famous rabbi of Christ's own time, Philo of Alexandria, declares (*Leg. Alleg.* XII. 1): "At *seven* a man is a logician and grammarian; at *fourteen* [not at thirteen or twelve] mature, because able to be the father of a being like himself; while at *twenty-one*, growth and bloom are over." De Pressense (*Jesus Christ, His Times, Life and Work*, p. 211) declares: "Jesus undertook the journey to Jerusalem to celebrate the Passover feast *at the age* when the young Jews began to take part publicly in the religious life of their people," although Juda Ben Toma, another great Jewish teacher, says (*Pirk. Aboth*. V. 21): "A son of *five* years is to read the Scriptures; one of *ten* to give himself to the Mishna, of *thirteen* to the Commandments, of *fifteen* to the Talmud; of *eighteen* to marriage." Greswell (1850), Geikie (1859), Farrar (1870), Beecher (1871), Fouard (1879), Deems (1884), Phelps (1897), Rhees (1900), Burgess (1908), French (1911), Whitman (1913), Barton (1926) Klausner (1927), and many other biographical authors and essayists have given it as their opinion, in one form or another, that Jesus was delivered, *at the age of twelve*, to the elders and authorities of the

Jewish commonwealth for instruction, initiation, or confirmation in the ritual and ceremonial laws of church and state, although there is not a word to that effect in the text or context, but rather a great deal to the contrary. Thus, for instance, Dr. Deems declares that Jesus was *carried* to the Temple, to be *initiated* into the regular study of the law," and Greswell and French, that He was made a "Son of the Law," and had to "undergo a ceremony like confirmation," while Barton, altogether to the contrary, avers: "In later centuries Jewish boys began *at fifteen* [not thirteen or even twelve] to study the Talmud, or, to be more specific, the legal decisions of the rabbis who commented on the Mishna. As these comments are all *much later* than the time of Jesus, they could not have formed a part of the course of study in the schools when He was a boy." Again, while Farrar terms the age of *twelve* "a decisive epoch in education;" Andrews, "the beginning of instruction in the law"; Fouard, "the point of participation in legal ceremonies," and Didon, "the cessation of pupilage," Georges Berguer pronounces it the age of *conversion* or change of heart. He says verbatim: "Now we know today, through the investigations of psychology, that *this age*, which varies with race and climate, in which the most important and the most trying physiological changes take place, is also the moment of parallel and capital psychic transformations. The child is on the point of becoming a man; and this does not take place without crises. . . . These psychic crises manifest themselves very clearly in the religious life, and . . . the age of puberty is also, roughly speaking, in the majority of cases, the age of *conversion*." "If," then, he continues (pp. 148-9), "we combine the contributions of religious psychology and those of psychoanalysis in regard to *conversion*, we find ourselves in a position to form a fairly exact idea of the great psychic transformation which takes place in the adolescent at the moment when he enters manhood. We know that at this eminently critical hour of his development, a complete readaptation of the forces of life to the environment must take place. . . . We might say," concludes Prof. Berguer (p. 148), "that there took place in his life something equivalent to what would be a conversion in our own, but that it was not a conversion in the generally accepted meaning of the term."

Now we are bound to pause again to inquire: What relevancy has this "something," this evolution analogous to conversion, to the story of Jesus *when a boy of twelve*? We do not perceive how, or in what manner, Jesus, at this time, did undergo any sort of transformation, development, or readaptation. That He did is all guesswork; not a matter of record. Moreover, according to His own definition (Matth. XVIII. 3) of conversion, which was

"to become as little children," the process is the categorical opposite of "passing into the adult state." "This violent movement" is diametrically opposed to anything experienced or expressed by Him, according to the Gospels. So, then, why mention conversion, regeneration, or "an evolution analogous to that which every man worthy of the name must undergo?" Surely, we must have "grounds more relative than this!"

And as to the motivation of this story with a plea for education, instruction, tuition, or any kind of mental training, it appears to us as if culture of any kind, naturally inculcated, were the very foil or background, the opposite of that which prompted and suggested this narrative. Does it not look like a contradiction of the Word to emphasize and stress that which the author desired to offset and minimize? Is it not the pith and purpose of this story to show that, before the elders and teachers of Israel saw Him, He was *already* in possession and in fruition of all that which these doctors of divinity were able to teach? How, then, if the gist of this story be true, can the object of His journey to Jerusalem have been a part of His pupilage or a matter of peddling information to Him?

As there was no solid reason discoverable for the belief that the evangelist narrated this episode because of physiological phenomena apparent at the age of twelve, so there is no valid reason discernible why He should memorialize that story because of ordinary or normal psychological traits observable in Him. The truth is—and truth it certainly is—that he recorded this episode, not because of anything that might be ordinarily adduced as characteristic of youth or congenial to regular growth and development, but because of something so outstanding and so strongly contrasted to the common and ordinary, that it fairly challenged notice and clamored for attention. And this is what gives the episode its epochal chronological character. It would have had no such character but for the extraordinary thing that gave feature and countenance to it, its coincidence in point of time with other happenings and historical events which help to show us this remarkable incident from the juvenile years of Jesus' life in its proper chronological relation. So let us get a clear view of the lay of the land, so to speak.

Some authors of so-called "Lives of Christ" would make it appear as if the habit of His parents or the custom of His nation regarding the attendance at the great feasts was primarily and principally responsible for the time of Jesus' attendance of the Passover "*when He was twelve years old.*" This is not altogether correct. The parents did go every year to the feast according to personal habit and national custom, but, in this particular case, there was a particular cause for the move. It was in this particu-

lar year, as the evangelist says in a misplaced section of his Gospel, "it came to pass *in those days*, that there went out a decree from Caesar Augustus, that all the world should be taxed.... (And this taxing was first made when Cyrenius was governor of Syria.) And all went to be taxed, every one into his own city." Josephus, the Jewish historian, relates the facts regarding the general migration at this time in the following manner (*Antiq.*, B. XVIII. C. I. §1): "Now Cyrenius, a Roman senator, and one who had gone through other magistracies, and had passed through them till he had been consul, and one who, on other accounts, was of great dignity, came *at this time* into Syria, with a few others, *being sent by Caesar* to be a judge of that nation, and to take an account of their substance.... Moreover, Cyrenius came himself into Judea, which was now added to the province of Syria, to take an account of their substance, and to dispose of Archelaus' money." And Eusebius, reporting the taxation by Quirinius, makes the following comment: "Quirinius being sent by a decree of the senate into Judea makes a description of possessions and private dwellings (or, according to Mai's Edition, of possessions and *persons*!)." If, then, at any time, Jesus ever went, in response to a decree of Caesar Augustus, to the home of His ancestors or to the capital city of their kingdom, it was at this time "when He was twelve years old" or in the thirteenth year of His age.

Now the matters of fact involving the exaltation of Jesus through the eulogy of Luke as well as the degradation of Archelaus through the punitive action of Caesar Augustus and his agent Quirinius, may be computed along various lines of chronology. For one thing, we are enabled by the numbers connected with the life of Christ, few as they are, to establish definitely just when it was that "Jesus was twelve years old." "The date of this single event," says Dr. Wieseler, referring to this point, "may be readily determined, since twelve added to 750 A. U. C., the year of the Lord's birth, gives the year 762" [A. U. C., according to Varro, or 9 A. D.]. Here the method by which this result is reached is in itself unimpeachable, and the whole example in arithmetic could be declared exemplary if the erudite doctor had only endorsed the old traditional date of the Nativity. If, instead of "one of the early months of 750 A. U. C. = 4 B. C. (*Synopsis*, p. 126), he had adhered to the almost universally accepted date of December twenty-fifth of the preceding year 749 A. U. C. [Varro] or 5 B. C., he would have arrived at the precise point of time "when Jesus was twelve years old" or in the thirteenth year of His age: twelve, from December twenty-fifth, 8 A. D., to December twenty-fourth, 9 A. D.; thirteenth, simply in J. P. 4722 or 9 A. D.

On the other hand, the date of these regally impressive events, the enthronement of Jesus in the spiritual world as well as the dethronement of Archelaus in the material, may be accurately determined from the execution of the decree of Caesar Augustus that the whole Jewish world should be taxed. We know not only from Luke, the gospel-writer, that this first of Jewish taxings came to pass when Cyrenius was governor of Syria, but also from Josephus, the historian of the Herods, that these taxings were made "in the thirty-seventh year of Caesar's victory over Antony at Actium." (*Antiq.* B. XVIII. C. II. §1) Now, as everyone knows, the sea-fight at Actium took place on the second of September, in the year when Caesar, the third time, and M. Valerius Corvinus Messala were consuls: consequently in the sixteenth year of the reformed Julian calendar or the 267th year before the recount of Censorinus in 238 A. D.; in the third year or two years and four and one half months before the inauguration of the general Augustan Era (which introduction took place 265 years before Censorinus; or, availing ourselves directly of the seriation known as the "*Egyptian* Augustan Years" or the "*Actiac Era*," 267 + years plus an indefinite number of days before Censorinus composed his famous symposium of dates in 238 A. D. Being specifically an *Egyptian* Era, which, in fact, began four days after the close of Cleopatra's reign with the expiration of Nab. 718, but canonically, commenced with the following Egyptian New Year's day (first of Thoth, Nab. 720, or August thirtieth, 29 B. C.), dates defined in terms of the Actiac Era may be most conveniently computed in years of the *Nabonassan Era*. Accordingly, when the census executed by Cyrenius is reported to have been accomplished in the thirty-seventh year of the Actiac Era, the year so pointed out is the $[719+37=]$ 756th year of the Nabonassan Era, extending from August twenty-second, 8 A. D., to August twenty-first, 9 A. D. If further corroboration of this fact is needed, such confirmation may be found in the seriation of the Era of Antioch, as immortalized on a coin dated the thirty-sixth year of the Actiac Era and the fifty-fourth year of the Antiochian Era. As the battle of Pharsalia, which inaugurated and established the autonomy of Antioch, was fought near the summer solstice of J. P. 4667 [47 B. C.] or Nab. 701, it follows that the fifty-fourth year of Antiochian independence must be identified with the 4721st year of the Julian Period, which is the eighth year of the common Christian Era, and the 755th year of the Nabonassan Era, which is also the thirty-sixth year of the Actiac Era. And being thus the twelvemonth which immediately precedes the thirty-seventh year of the Actiac Era, in which the taxing of the Jewish world is said to have been carried out to the utter extermination of

Israelitish rule in the land of Israel, it just simply is not feasible to dislodge the thirty-sixth or thirty-seventh year of the Actiac Era, either to please the chronologists of the earlier-occurrence school (like Dr. Jarvis, Mr. Page, Prof. Totten, et al.) or to placate the staunch adherents to the commonly received chronology. The thirty-seventh year from the sea-fight at Actium, therefore, being shown to have been coincident with the 756th year of the Nabonassan Era, is almost perfectly defined and limited by the dates limiting the thirty-eighth canonical year of Caesar Augustus, to wit, from the first of Thoth, Nab. 756, or August twenty-first, 8 A. D., to the last of the Nab. 756, or August twentieth, 9 A. D. Within this space of twelve months there can have been but one vernal season which could have been the Passover season of the youth of Jesus, and that was the spring time when the decree of Caesar Augustus went forth, in the thirty-seventh year of the Actiac Era, that all the estate of Archelaus should be taxed.

It is true, Dion Cassius narrates the expulsion and expatriation of Archelaus under the consulship of Lepidus and Arruntius, ordinarily placed in the 4719th year of the Julian Period or 6 A. D. Inconsistently with facts, but in keeping with his system, Dr. Jarvis places the consulship of M. Aemilius Lepidus and L. Arruntius a year earlier, in J. P. 4718 or 5 A. D., but, going back on his authority, locates the banishment of Archelaus a year later. He justifies this procedure on the authority of Josephus, though not to the length of his testimony. What Josephus, however, attests is not the thirty-fifth year of the Actiac Era, but the thirty-seventh, and the thirty-seventh year of Actiac victory is not A. D. 5 or 6, but 9 A. D. Consequently we must say: "Herod of Palestine, on account of some accusations by his brethren, was sent into exile beyond the Alps, and his territory confiscated," not in the consulate of Lepidus and Arruntius in 6 A. D., but in the consulship of C. Poppieus Sabinus and Q. Sulpicius Camerinus, J. P. 4722 or 9 A. D. Into this year, therefore, also belongs the decree of Caesar Augustus, ordering all persons and possessions subject to Archelaus to be taxed. And so, in 9 A. D., "all went to be taxed, every one into his own city."

The specific time when Jesus with His parents repaired to Jerusalem, as implied by Luke, in obedience to the command of Caesar Augustus, to submit to the registration and taxation carried out under Cyrenius, the governor of Syria (Luke 2:1-3) was undoubtedly the week before the Passover in the thirty-seventh year of the Actiac Era, Nab. 756 or 9 A. D., and the incident from the life of Jesus "when He was twelve years old," recorded in *Luke* 2:41-52, was as undoubtedly an occurrence of the week following the festive seven-day period of the Passover

celebration. According to the opinion of the best commentators the parents of Jesus and Jesus Himself persisted in celebrating the Paschal feast until all the days of the festivity were fulfilled. These days of festivity, divinely ordered to be seven in number, and ordained to include the fifteenth to twenty-first of the month Abib or Epiphi, which Egyptian month corresponded, at the time of the Exodus, to the Assyrian-Babylonian month Nisan and to the Syro-Macedonian month Xanthicus. Counting in the preliminary "day of preparation" as the first day of the Passover or Feast of Unleavened Bread, the festival was frequently accounted a feast consisting of "*eight days*," viz. from the fourteenth to the twenty-first day of the month (see Ex. 12:18,19, Ex. 23:15 and Deut. 16:16). When, therefore, the evangelist declares that "when they had *fulfilled the days*, they returned" (Luke 2:43), he must be understood to mean, not a half-way observance or a part-time accommodation made possible by rabbinical and talmudic interpretation. To "*fulfill the days*" can only mean to stick it out, to persist, to persevere *unto the end*. The end being a "convocation" not necessarily a Sabbath, but for all that a *seventh* day, the *octave* of the opening "convocation," according to Ex. 12:16, it appears certain that Jesus and His parents continued to the last with their fellow-countrymen from "*the fourteenth day* of the month at even...*until the one and twentieth day* of the month at even." (Ex. 12:18). This assumption being granted, it is possible to compute the exact date of the "*three days*" of Luke 2:46 just as fairly and confidently as if the description of time had been inspired in Holy Writ. So the question obtrudes itself, What was the date of the disappearance, concealment, and discovery of Jesus "when He was twelve years old"?

The *three days* that elapsed, wholly or in part, before His parents found Jesus, may, according to Andrews' *Life of Our Lord* (p. 109), be thus computed: "the first, that of their departure from Jerusalem; the second, the day of their return; third, the day when He was found; or, if we exclude the day of departure, first, the day of their return; second, the day of search in Jerusalem; third, the day when He was found." Now we take it that the search for the missing boy began with the discovery of His absence: therefore the day (Nisan twenty-second) of the parents' departure and instant return must be accounted the first day. Their going away in the morning and coming back before sunset having occupied the whole *first* day, the twenty-second of Nisan cannot have been a Sabbath (or regulation holiday), as, for one thing, the holy family would scarcely have set out on their homeward journey on a regular Sabbath-day; and, on the other hand, the doubling up of the

distance to be travelled would have constituted a transgression of a Sabbath-day's journey, and this they would have avoided even in their anxiety. The *second* day (Nisan twenty-third) was obviously spent entirely in the search, the anxious parents extending their quest from morn till night to every nook and corner of the City, excepting in the Temple, where, having just left a seven-day celebration, they did not think it worth while to look. Hence it is plain that the second day (Nisan twenty-third) was not a Sabbath. The *third* day, however, not only may, but must have been a Sabbath, since, for one thing, the parents of Jesus did not look for Jesus in the now deserted dwellings of their friends or relatives (whom they presumed to have gone to the Temple), but repaired at once to the Temple precincts, as the only place which they had left unsearched and which had now become the one place most likely to be frequented, especially on Sabbath.

So, then, we have in this conjuncture of "*three days*" the succession of the week-end days Thursday, Friday, and Saturday, which "*three days*," though undated, were undoubtedly the twenty-second, twenty-third and twenty-fourth days of the Jewish month Nisan or the Syro-Macedonian month Xanthicus. Now, does our scheme of the calendar, as supposed to have been used by the Jews at the time of Jesus, supply a series of dates fulfilling these conditions in 9 A. D., as being the thirty-seventh year of the Actiac Era? or are these conditions well met by some other year, claimed by one or the other chronologist to have been the thirteenth year of Jesus?

In computing the date of Christmas or the Birthday of Jesus Christ we found that the first nineteen-year cycle of the Vth Calippic Period had come to an end on the 57443rd day of the Asmonean-Herodian Era, or on Sunday, the thirty-first of March, 7 B. C. We concluded our calculations at the end of the tenth year of the second nineteen-year cycle of the same period, terminating that particular computation with the 61075th day of the Asmonean-Herodian Era, or, in terms of the Julian calendar, on Saturday, the tenth of March, 4 A. D. In order to visualize the passage of time, as it was enregistered in the Jewish and Julian calendars of the day, we simply shall carry on the miniature problems in arithmetic from that final point to the end of the current cycle in 13 A. D., so as to include every possible conjecture or theory as to the time when it was that Jesus was twelve years old or in His thirteenth year. Thus it will be seen that, so far as the arrangement of the calendars is concerned, there can be no variation or shadow of turning. We begin, accordingly, with the equation that the 61075th day of the Asmonean-Herodian Era is equal to the tenth of March or the sixty-ninth day of 4 A. D.

<i>Jewish—Julian.</i>			
61075	61075 ..	69 d. in 4 A. D.	69
24 d. in Nisan or Xanthicus.	30	30	+24
7)61099	11. Sel. 316 = { 1 147 30 177	1 147 30 177 } d. in Sel. 316	93 =
8728+3			Tues., Apr. 3
		454	
		-365 d. in 4 A. D.	
61460	61460 ..	89	89
24	354	354 d. in Sel. 317	24
7)61484		443	113 =
8783+3		-365 d. in 5 A. D.	Tues., April 23
		78	78
61814	61814 ..	354 d. in Sel. 318	24
24	354		
7)61838		432	102 =
		-365 d. in 6 A. D.	Sat., April 12
8834+0		67	67
62168	62168 ..	177	24
24	177	30	
7)62192	14. Sel. 319 = { 30 177	177 } d. in Sel. 319	91 =
			Wed., Mar. 31
		451	
		-366 d. in 7 A. D.	
62552	62552 ..	85	85
24	354	354 d. in Sel. 320	24
7)62576		439	109 =
8939+3		-365 d. in 8 A. D.	Tues., April 19
62906	62906 ..	74	74
24	177	177	24
7)62930	16. Sel. 321 = { 30 177	30 177 } d. in Sel. 321	98 =
8990+0			Sat., April 8
		458	
		-365 d. in 9 A. D.	
63290	63290 ..	93	93
24	354	354 d. in Sel. 322	24
7)63314		447	117 =
9044+6		-365 d. in 10 A. D.	Fri., April 27
63644	636 ..	82	82
24	44	354 d. in Sel. 323	24
7)63668		436	106 =
9095+3		-366 d. in 11 A. D.	Tues., April 15
63998	63998 ..		

<i>Jewish—Julian.</i>			
24	19. Sel. 324 = {	177	70
7)64022		30	177
		177	30
		177	177
9146 + 0			d. in Sel. 324
			70
			24
			94 =
7)64382		454	D Sat., April 4
		64382 .. -365 d. in 12 A. D.	
9197 + 3			
		89th d in 13 A. D.	89 = Tues., Mar. 30
		+6940 d. in Cal. P. V. ³ .	
		+6940 d. in Cal. P. V. ⁴ .	
		+6940 d. in Cal. P. VI. ¹ .	
		+ 128 d. in Cal. P. VI. ² .	
		85330 d. in Asm. Her. Era.	

With the assurance vouchsafed by the addition of three complete Metonic cycles plus the fraction of a year (Sel. 382) in 70 A. D., representing the balance of the Jewish-Roman or Asmonean-Herodian Era after the close of the second nineteen-year cycle of the Vth Calippic Period, that the Jewish calendar-cycle has been kept "void of offence," either by excessive intercalation or by an unaccountable omission, we may now cast a calmly critical look at the miniature calculations of the last nine years of the Vth Calippic Period's second cycle. A glance at the scheme is enough to convince us that only the calendar of the 321st year of the Seleucic Era, which corresponds in the main to J. P. 4722 or 9 A. D., identifies the twenty-second, twenty-third, and twenty-fourth of Nisan or Xanthicus, the three days of Luke's gospel narrative, with the last three days of the week, April sixteenth, seventeenth, and eighteenth, of the year of grace 9 A. D. The thirteenth year of Jesus, which witnessed the general census of the Jewish world and the confiscation of Archelaus' state possessions and personal property, cannot be translated to the consulship of Lepidus and Arruntius, either in 6 A. D. or 5 A. D., because the latter, though otherwise eligible, is unconscionably too early, and the former, because it is both too early and also in error as to the week-day character of the three days' adventure. Nor can any other year within a radius of three years from the thirty-seventh year of the Actiac Era be appropriated as the thirteenth year of the youthful Messiah. The only year which anyway approximates the character of an eligible year is J. P. 4724 or 11 A. D., which quite as unequivocally is too late to be of service, being the fifteenth year of the young man Jesus. We therefore need not hesitate to adapt the framework of the Jewish calendar in accordance with the dates of the Boy Jesus' "three days" experience "when He was twelve years old."

It will be noticed that, in the ascertainment of these figures which forcefully and truthfully represent the chronological value

of each year's Passover date, we have utilized the elements of Jewish calendar construction undoctored and undrugged. To obtain, for instance, the time-determination of the Passover of 9 A. D., all that is necessary to get the serial number of days in the Era to which, for example, twenty-one for the twenty-first of Nisan (the last day of the Paschal feast) is added, is to add three complete lunar cycles ($6940 \times 3 = 20820$) together with the 354 or 384 days of the last five years of the current nineteen-year cycle respectively (384 for Sel. 321, $354 + 354$ for Sel. 322 and 323, and 384 for Sel. 324), and, not forgetting to add the 128 days of the last fractional year (Sel. 382 or 70 A. D.), subtract the whole, 22424 days, from the grand total of the Asmonean-Herodian Era (85330); we shall then have the 62906 days which sum up the preceding time up to and including the twenty-ninth of Adar, Sel. 320. Since this result is obtained without leger-de-main or trick manipulation of figures, and the date thus verified is in line with the fifteenth year of the next cycle, which immediately precedes the fifteenth year of Tiberius Caesar, this fact should be borne in mind when that most important of all data in the calculation of the death of Christ is brought into the reckoning. As we have ascertained from the computation of other dates before and after this, the zone of the lunar cycles into which the year Sel. 340 or 28-29 A. D. happens to fall, is not affected by the special intercalation of any additional days, and is therefore not to be influenced by the rape-like interpolation of Badhu under any circumstances.

From a practical application of the principles underlying the construction of the Jewish calendar, it appears that, adding together the last ninety-three days of Sel. 308 (of 5-4 B. C., the year Jesus was born), i.e. from the twenty-sixth of Casleu to the twenty-ninth of Adar (both inclusive), twelve times 354 days [$4 \text{ B. C.} + 8 \text{ A. D.} = 12 \text{ yrs.}$] or 4248 days in twelve lunar years, together with a complement of four embolismic months of thirty days each [$4 \times 30 = 120\text{d.}$] and two extra intercalary days or Badhu, and finally the twenty-four days of Nisan in Sel. 321, will yield the sum total of days contained in this portion of Jesus' life, viz., 4487 days. Setting beside this computation in terms of the Jewish or Syro-Macedonian calendar the parallel computation in terms of the Julian calendar, we find that this companion measurement of the same time contains, besides the last six days in 5 B. C. [from December twenty-sixth to thirty-first inclusive], twelve solar years of 365 days or 4380 days, with three bissextile or leap-year days, and ninety-eight days in 9 A. D. (January first to April eighth), including the third day after the Passover, making a total amount of 4487 days. The sums, according to both calendars being equal, and being equally divisible by seven with-

out a remainder, this conjuncture clearly proves that the third day after the Paschal feast was a seventh day or Sabbath, as required by the implications of the text and the logical deductions of the commentators and critics of all denominations. The calculation of days from Jewish data clearly demonstrates that Nisan twenty-fourth, Sel. 321, coincident with April eighth, 9 A. D., the day when Jesus was found in the Temple, being "twelve years old" or in the thirteenth year of His age, was the $[4487 \div 7 =] 641^{\text{st}}$ Sabbath after the Birth of Jesus on Saturday, the twenty-fifth of December, 5 B. C., or, adding the 4487 days to the 58443rd day of the Jewish Era which represented the date of His nativity, the $[62930 \div 7 =] 8990^{\text{th}}$ Sabbath in the century-old succession of Sabbath-days in the Asmonean-Herodian Era. Computing the date in terms of the Julianized Roman calendar, we find that the day of Jesus' discovery in the Temple, being the ninety-eighth day of J. P. 4722 or 9 A. D., being divisible by seven without a remainder, was the fourteenth week-end of a year that began and ended on a Sunday, and must therefore be distinguished with the dominical letter A. If, then, we adopt the date—Xanthicus or Nisan twenty-fourth, a Sabbath-day, or Saturday, the eighth of April, 9 A. D.—as the true day of the marvellous disclosure of the youthful Messiah, (being demonstrably the only date that does comport with the demands of historical record), we shall possess in this immensely important date a biographical pivot from which we may compute the life-time of Jesus in all directions to the finest degree of accuracy. Yes, so finely may we figure out every point and period in the life of the Master that there will be no perceptible difference in biographical delineation between the Life of Jesus and the lives of other ordinary men.

If, for instance, we knew at what hour of Christmas night the Word had been made flesh, even as we know the hour of His death, we could express the duration of His terrestrial existence down to the very minute. But, not to overdo a good thing, let us gratefully appreciate the fact that the time-limitations of the Life of the Lord Jesus have at last been determined; that the calendar and cycle defining these limits have so far been found to be correct; and that this one correct datum, which hitherto has hardly been deemed worthy of doing ancillary service in bringing about this consummation devoutly to be wished, has come into its rightful place of dominant, decisive authority. In profound appreciation, therefore, of this now acknowledged fact that, of all the invaluable chronological gems in the rich treasure-trove of the Asmonean-Herodian Era, the most precious because most precise datum for the Life of Jesus Christ has been discovered to be the date of His manifestation in the Temple "*when He was twelve years old,*" we

conclude this chapter with the words of the synoptic evangelists Matthew and Mark: "The stone which the builders rejected, the same is become the head of the corner." (Matth. 21:42; Mark 12:10).

VOLUME V. CHAPTER I

PAUL'S "FIFTEEN DAYS WITH PETER."

Reserving the next date—we mean the date of the crucifixion and resurrection of Jesus Christ—because it is the objective point to which all our arguments, calculations, and discussions are directed, for ultimate and final disposition, we come now to that part of the Jewish-Roman or Asmonean-Herodian Era which lies subsequent to our main objective. In this period, which we may style the Primitive Christian or Apostolic Age, because it comprehends practically all the activities of the men known as apostles of Jesus Christ, we shall endeavor to test all those explicit and implied descriptions of time which may in any way help to confirm and corroborate our conclusions as to the form and appearance of the Jewish calendar. If we succeed in establishing the date of any of the apostolic acts or transactions, this will tend to spike the entire frame-work in its place. If, on the other hand, nothing new be brought to light by this probe of apostolic times, it will serve at least to prove that in this part of Jewish history, there are no errors to be found, so that, by and large, it might also be described as the period of inerrancy, or the age of no mistakes.

In a special, particular way, this epoch includes preeminently the life and labors of Saul of Tarsus, who became best known and best-beloved as Paul, the apostle of Jesus Christ. Not less than four out of six or seven additional dates to be reviewed in this errorless section are applicable to our purpose because of the fact that Paul wrought and labored more than all the rest of the apostles. It is due to his uncontrollable travelling propensities as well as to his indomitable energy and will to do something worth while, that we possess so many invaluable itinerary notes and travel records to compare with the calendric and cyclical accounts of those dates. And thanks to the graphic descriptions and log-like notations of Paul's missionary tours preserved by Luke, the beloved physician and travelling-companion, we are able to determine at least four of his journeys to Jerusalem, and, through them, to demonstrate at least four more instances of time-determination in perfect accord and harmony with the reconstructed calendar of the times. In the present computation, we propose to define the chronological site of the first pilgrimage of Paul to the Holy City, as he himself tells us (Gal. I: 18 and

II.1), "three years" after his conversion to Christianity, and "fourteen years" before he "went up again to Jerusalem with Barnabas, when he took Titus with him also."

The pilgrimage on which Paul chose to take Titus with him, Barnabas being his regular companion in travel, is generally conceded to be his third journey to Jerusalem, the one mentioned in Acts XV. 2. The starting-point of Paul's apostolic career being shrouded in mystery, it is unavoidable that we should compute this beginning and his first going-up to Jerusalem from the date of the later mission when, with Barnabas and Titus, he was sent by the church at Antioch to the apostles and elders at Jerusalem with a message regarding the question of circumcision. This allusion to the great peritemnic controversy is a decisive argument in favor of the third visit of Paul to the Holy City; for it was at this convention of the apostolic college that the question of circumcision operated as the exciting cause of the general commotion among the adherents of the new faith. Then, when we have accomplished the task of determining the exact time of Paul's three-week-end visit with Peter (reckoning backwards from the rear), may we essay to reach the same objective reckoning from the time of his conversion by means of his three years' preparation for the apostolic career. So then, when was the conclave of the apostolic college concerning the question of circumcision?

The third official visit of Paul to the metropolis of the Jewish and Christian religion, with a view to attending this very convention, is variously placed by Lewin in 48, by Petavius in 49, by De Wette and Smith's Bible Dictionary in 50 or 51, and by Ussher in 52 A. D. With such a diversified front to begin with, we can expect nothing better than an approximate placing of Paul's first visit "fourteen years" earlier. But, instead of finding Paul's sojourn with Peter confined to the five years 34 to 38 A. D., we find the assignment spread over twice as many years, to wit, from 33 A. D. to 43 A. D. Just "to convey to our fellow students," (as Prof. Totten puts it), "a faint conception of what has already been done towards confusing the chronology of this book [the Acts of the Apostles], we shall mention a galaxy of great names in connection with this great subject." Quoting from the compendium of St. Paul's life, (as given in the *Encyclopedia of Chronology* by Woodward and Cates and published by Prof. Totten in his *News Leaflet* Nos. V-VII), we see the first apostolic tour of St. Paul consigned by Prof. Totten to 33, by Tillemont to 37, by Ussher to 38, by Lewin to 39, by Basnage to 40, by De Wette and Smith's Dictionary of the Bible to 40 or 41, and by Wieseler to 43 A. D. "And many others can be cited!"

Notwithstanding this almost unbelievable *tohu va bohu* in

biblical chronology, the fact remains that, if this tour of Saul of Tarsus was a real, authentic happening of history, it happened some time and somewhere within this chronological chaos of ten to twelve years; and if we have at all succeeded in rebuilding the ancient structure of the Jewish calendar as it was used in the times of Paul and Peter, we shall also succeed in permanently locating this Cain-like fugitive from the legitimate folds of chronology. To make quite sure that we ignore no possible or potential alternative of this date, and, at the same time, to visualize the workings of this one-time historic calendar, we shall subject the first twelve years of the fourth nineteen-year cycle of the Vth Calippic Period to the painstaking scrutiny of individual calculation. Hence we will consider in this close-calculating process the years 32 to 43 A. D.

It must be admitted before we begin this experiment that we do not discern any good, substantial reason why we should go to this extreme extent of conciliation and concession. There is no good chronological, psychological, or any other kind of logical motive to give so much as a second thought to some of these unchronological conclusions. Take, for instance, all the allocations after the year 38 A. D. We cannot conceive why Saul of Tarsus should have postponed and put off his first pilgrimage to Jerusalem as a convert to Christianity to the third year after his conversion? If this was in the third year of Caius Caligula, what was there to prevent him from going to the City a year or two earlier? If it was as late as the third year of Claudius Caesar, what was to hinder him then from going up sooner? It cannot have been the mere distance of Arabia from Jerusalem, for "Arabia is a country that borders upon Judaea." (Jos., *Ant.* B. XIV. C. I, §4) But Arabia, close as it was to the borders of Judaea, was ever a convenient refuge and hiding-place for Jews in a political or quasi-political controversy. Thus it had been a retreat for Hyrcanus, the ward of Antipater, the father of Herod the Great. So it had been the asylum of Herod himself in the first instant of his danger, before he went on to Egypt and Rome to get for himself a kingdom. And so it had been a sanctuary to the great apostle when, all of a sudden, "he that destroyed them which called on this name in Jerusalem, and came hither [to Damascus] for that intent, that he might bring them bound unto the chief priests"—he, Saul, "increased the more in strength, and confounded the Jews which dwelt at Damascus, proving that this is very Christ" (Acts IX. 21.22). Hence we have here a psychological back-ground that will bear looking into.

Considering it an axiomatic truth that he who later became the devoted "slave" of Jesus Christ (Rom. I. 1; Phil. I. 1; etcetera) had before his conversion been quite as loyal a servant

of Joseph Caiaphas, Pontius Pilate, Herod Antipas, and other rulers of the Jewish world, political and ecclesiastical, and that, upon his radical change of front, he would naturally become the object of the hatred and persecution of his one-time superiors and patrons, it follows as a fair conclusion that the newly converted apostle to the Gentiles would not consider it safe to repair to Jerusalem until his enemies had been removed from office, or until his present place of refuge had in its turn become unsafe, or until both contingencies had taken place. In other words, Paul would not revisit Jerusalem until the powerful of former days had been stripped of power, nor until the place of safety had become a place of danger and a source for alarm. Now, when did such a contingency occur?

We know from Josephus, the historian of the times, that the pivotal events in the revolution of Jewish affairs happened in the second-last year of Tiberius Caesar's life; for it was then that "Agrippa, the son of Aristobulus, went up to Rome, *a year before the death of Tiberius*, in order to treat of some affairs with the emperor," etcetera. (*Antiq. B. XVIII. C. V. §3*). As Archelaus, the son and successor of Herod the Great, had gone up to Rome immediately after the expiration of Herod's life and reign "to get himself a kingdom," so Agrippa, the son of Aristobulus, went up to Rome immediately upon the death of his uncle Philip for the same end and purpose—"to get himself a kingdom." And this was "*a year before the death of Tiberius*."

But simultaneously with the decease of Herod Philip, the tetrarch, there also occurred the degradation of Joseph Caiaphas, the high-priest, the deposition of Pontius Pilate, the procurator of Judaea, and the defeat of Herod Antipas, the tetrarch of Galilee, by Aretas, the king of Arabia. At any rate, all these events are narrated by Josephus as happening "*a year before the death of Tiberius*," so that, if the course of Paul's life was in any way influenced by the political events of the day, his first public appearance in Jerusalem as a Christian and as a candidate for the apostolic office must have taken place about "*a year before the death of Tiberius*." So now the great question is, When did Tiberius Caesar die?

Not to mention the different systems of chronology sponsored by Dr. Seyffarth or Dr. Jarvis, Page, Totten, and others, according to whose scheme, respectively, all dates at this period must be moved up a year or a couple of years further down, we shall confine ourselves to those dates of the commonly accepted system which at this point is undoubtedly correct, that which places the death of Tiberius in J. P. 4750 or 37 A. D. Even according to this system, says N. N. in his *Epitome*, pp. 321-22, "Norisius places the recall of Pilate from his government by Vitellius in

November A. D. 36, and his commencement in A. D. 26. But Lardner has shown from Josephus himself that after the removal of Pilate, Vitellius was present at Jerusalem, at a Passover in the life-time of Tiberius, that he returned to Antioch, and from thence by the order of Tiberius proceeded to the Euphrates to negotiate with Artabanus, king of Parthia; that after that negotiation he sent an account to Tiberius and received from him an answer; that Vitellius then prepared by command of Tiberius a war in Petra; that on his way thither he was again at Jerusalem at a feast; finally that four days after his arrival he received the news of the emperor's death. This series of events determines this last visit [of Vitellius] to Jerusalem to the Passover of A. D. 37, the former visit to the Passover of A. D. 36, and the removal of Pilate (a few months before) to the autumn of A. D. 35, about eighteen months before the death of Tiberius. Lardner further confirms from Tacitus (see Tacitus, *Annals* B, VI, C. XL.) that Vitellius was engaged in Parthian affairs in A. D. 36." When, then, was the last year of Tiberius Caesar?

The death of Tiberius Caesar, being assigned by the majority of chronologists to 37 A. D., by Dr. Jarvis to 36 A. D., and by Dr. Seyffarth to 39 A. D., was, accordingly, a matter-of-fact incidental, in terms of the Syro-Macedonian or Jewish calendar system, to the fourth, fifth, or seventh year of the fourth nineteen-year cycle of the Vth Calippic Period. In other words, it occurred in the last month or toward the close of the Seleucid years (hieratically reckoned) 347, 348 or 350, a part of the Syrian or Jewish sacred year which uniformly fell into the early springtime of the year. Consequently our task is to calculate the Passover seasons of the years mentioned with a view to enabling us to ascertain in what relation or degree of proximity the Paschal seasons of Sel. 348, 349, and 350 stood to the reported date of Tiberius' death in J. P. 4749 (or 36 A. D.), J. P. 4750 (or 37 A. D.) and J. P. 4752 (or 39 A. D.).

The preceding Seleucid year 347 ended, as we have seen, on the 72771st day of the Asmonean-Herodian Era, and corresponded to the seventy-seventh day of J. P. 4749 or 36 A. D. It had been a "full" year, rendered "perfect" or "complete" by the addition of one day to the otherwise regular lunar year of 354 days, having been the fourth year of the current fourth nineteen-year cycle of the Vth Calippic Period. Adding to this correlation the fifteen days needed to bring on the initial day of the feast of unleavened bread when the Jews rejoiced in their deliverance from Egypt and their independence as a nation, we find that the $(72771 + 15 =)$ 72786th day of the renaissance era corresponded with the $(77 + 15 =)$ 92nd day of J. P. 4749 or 36 A. D., that is to say, with Saturday, the second of April of that year. If, then, Tiberius died on the sixteenth of March, according to Suetonius, or on

the twenty-sixth of March, according to Dion Cassius, there was an interval of $(16+14=)$ twenty days in the former case, or an intermission of only $(6+4)$ ten days in the latter alternative, in which a report of the emperor's death might reach the president of Syria while at Jerusalem on the fourth day of the feast. Considering how tedious and slow communication was in those days, when the average sailing-time of a ship like the *Castor* and *Pollux* was twelve days for the passage from Puteoli to Alexandria, it becomes at once apparent how unlikely (though not impossible) it must have been to deliver a letter to Vitellius, announcing the exit of the tyrant from Roman pomp and power, in the short space of time vouchsafed for its delivery. It is therefore highly improbable that Tiberius surrendered his life and imperial rule in J. P. 4749 or 36 A. D.

Convinced on other grounds that J. P. 4750 or 37 A. D. is much more likely to have been the death-year of Tiberius Caesar, the great mass of chronologists are agreed that it was so indeed. To give our consent, however, to this almost universal agreement, it is necessary to dispose of a dilemma created by the modern method of intercalation foisted by modern calendar-makers on the Julian Period and kindred ancient instruments, namely, whether it is historically correct to insert an embolismic month in the *fifth* year or the *sixth* year of a lunar nineteen-year cycle. If it is correct to inject the thirty days complement in the fifth year of the cycle, then it must be done in the late summer or early fall of 36 A. D. If in the sixth year, as modern calendar-makers insist, then in the late summer or autumn of 37 A. D. A small adventure in arithmetic will show the difference it will make in the relation of the Passover to the death of Tiberius.

If we assume that the admittedly scientific arrangement of modern astronomers is correct, and accordingly treat the fifth year of the cycle as a common year of 354 days and therefore postpone the intercalation of thirty days until the sixth year, the diurnal aspect of the two years will look like this:

		<i>Jewish . . . Julian.</i>			
72771		72771	77	77	
15	5. Sel. 348 =	354	+354 d. in Sel. 348	+15	
7)72786			431	92 =	
			-365 d. in 36 A. D.	B	Sat., Apr. 2
10398+0					
73125		73125	66	66	
15	6. Sel. 349 =	177	177	+15	
		30	30		
7)73140		177	177	81 =	
					Wed., Mar. 22
10448+4			450	A	
			-365 d in 37 A. D.		
		73509	85		

If, on the other hand, we admit that the calendric features of the years were sought to be corrected (for better or worse) in the *fifth* year, then they wore an aspect like this:

		<i>Jewish</i> ..	<i>Julian</i> .	
72771		72771 ..	77	77
15		177	177	15
5. Sel. 348 =		30	30	
7)72786		177	177	92 =
10398 + 0			461	B Sat., Apr. 2
			-365 d. in 36 A. D.	
73155		73155 ..	96	96
15		354	354	15
6. Sel. 349 =				
7)73170			450	A
10452 + 6			-365 d. in 37 A. D.	111 =
		73509 ..	85	Fri., Apr. 21

Or, if we were bound to believe that the equation of the lunar and solar cycles was accomplished by the intercalation of thirty days *in the springtime of the sixth year*, the result would be the same: $66 + 30 + 15 = 111 = \text{Fri., April 21st, 37 A. D.}$

The significance, then, of this numerical riddle is this, that, if Tiberius died, as affirmed by Suetonius, on the sixteenth of March, the ship entrusted with the message of his death was one of the very first to sail in that season, this being the third day after the opening of the sea on the thirteenth of this month, and having only six days left before the initial day of the Passover on March twenty-second to execute its record-breaking trip from Puteoli to Alexandria, and leaving only three days and a half for the special delivery of that letter to Vitellius with phenomenal despatch! Or, if the claim of Dion Cassius be more correct, we have the unheard-of achievement of an anachronistic transmission of the news that Tiberius was dead on the day before he died, for, in this case, Vitellius must have heard of the emperor's death on the twenty-fifth of March, where it happened in reality on the twenty-sixth. Surely this earlier location of Tiberius' death in 36 A. D. (as perpetrated by Jarvis, Page, Totten, and others), is an absurdity with a vengeance!

On the other hand, if we concede that the historically more correct way of intercalating the necessary thirty days' complement in the fifth year of the cycle, the physiognomy of the years in question will appear like this. Adding the first fifteen days of the Jewish Passover month to the last day of the Asmonean-Herodian Era, 72771 in Sel. 347, or the seventy-seventh day in J. P. 4749 or 36 A. D., we reach the 72786th or ninety-second day, respectively, as the first day of the Feast of Unleavened Bread,

Saturday, April second, 36 A. D. Superadding to these figures the $354+30$ days of the fifth year of the cycle (minus the 365 days of the Julian year 36 A. D.), we arrive at the 73170th day of the Era and the 111th of the Julian year 37 A. D. as the opening day of the Paschal festivities, being Friday, the twenty-first of April, 37 A. D. On the fourth day of this Passover celebration, the 73173rd day of the Era and the 114th day of the year 37, Vitellius received the letter reporting the decease of Tiberius Caesar, who is said by Suetonius to have been smothered to death on the sixteenth of March, but by Dion Cassius on the twenty-sixth of the month. Under the present hypothesis, the relation of the Passover to the death of Tiberius will appear both normal and natural, the feast beginning twenty-six days after the great and mighty had fallen, allowing a fleet-footed messenger or a fast-sailing vessel a full month to deliver a letter on the fourth day of the feast. How easily the calendric conditions of 37 A. D., the year adopted by the majority of noted chronologists, adapt themselves to the demands of history!

If, finally, (merely to complete the series of small calculations) we examine the date supposed by Dr. Seyffarth to have been the true one, we shall speedily experience a revulsion from this ill-founded hypothesis. The year J. P. 4752 or 39 A. D., the year thus pitched upon by Dr. Seyffarth, embraced within its unpretending primetime both the close of Sel. 350 and the start of Sel. 351 (if reckoned hieratically), thus equating the 73863rd day of the Asmonean-Herodian Era with the seventy-fourth day of the Julianized Roman year J. P. 4752 or 39 A. D. Fifteen days later the Passover began, before which Tiberius is supposed to have died, sufficiently in advance of its fourth day that the news of the despot's opportune death averted the war on Arabia and prevented Vitellius from wreaking vengeance on the vanquisher of Herod's army. Accordingly, whether we inject an intercalation of a month in the fifth or the sixth year of the cycle, the first day of the Passover in this year was the 73878th day of the Jewish Era and the $(74+15=)$ 89th day of J. P. 4752 or 39 A. D. Being also the $(45+39=)$ 84th year of Caesar's Reformed Calendar, it was a leap-year, making the eighty-ninth day of the year (with the Sunday letters FE) Saturday, the twenty-ninth of March, 39 A. D. If, then, according to Suetonius, the old tyrant died on the sixteenth of March, there were, at the utmost, only sixteen days at the command of the messenger who carried the news of his death to Vitellius. If, according to Dion Cassius, the old tyrant succumbed to the great leveller on the twenty-sixth of March, the maximum of time allowed for the transmission of the message was only one short week, or a scant half dozen of days. Truly, a futile and unprofitable endeavor to impress this year

J. P. 4752 or 39 A. D., into incompatible service as the date of Tiberius Caesar's decease. A more unlikely time could hardly have been selected.

There emerges, then, as usual in such cases, only one contingency with all the appearance of actuality and historicity, and that is the one which saves the situation, converting the hopelessness and despair of the seeker after truth into triumphant confidence and conviction. The year 37 A. D., responding to the demands of history with the alacrity and adaptability which only actuality can muster, does this. It does this because it's verity! But it should be noted,—and that is what we desired to ascertain—that it does this only on the hypothesis that an intercalary year in the Calippic nineteen-year cycle preceded it. What, then, doth hinder us to be baptized in the fulness of conviction that the fifth year (not the sixth year) of the cycle was here, in Sel. 348 as well as in Sel. 308, the correct and regular place of intercalation for the second insertion of thirty days in every nineteen-year cycle of the Calippic Period, since nothing else will answer the conditions imposed and postulated by history.

By way of confirmation, we may superadd to this already redundant demonstration of calendric facts, the evidence of Ptolemy's *Astronomical Canon*, to wit, that Nab. 783 is designated in that masterpiece of chronological measurement as the twenty-second and last regnal year of Tiberius Caesar, and that Egyptian year terminated, if considered "fixed," on the twenty-ninth of August; if regarded as "vague," on the thirteenth of August, 36 A. D.: consequently it must have preceded his death in its entirety, that is to say, up to its very last day. To be accounted as "full" or "fulfilled," his death must have occurred after the eschathemeron of Nab. 783, in the spring of J. P. 4750 or 37 A. D.

By way of a final finishing touch to the canonical and cyclical evidence already adduced, we may add the quasi-astronomical proof contributed by a horoscope of Nero's birth, bound up in the frame and fabric of the year so inextricably that even Dr. Seyffarth assigns this nativity to 37 A. D., although he relegates the death of Tiberius to 39 A. D. He says in his *Summary of Recent Discoveries in Biblical Chronology* (pp. 25 and 90): "We find, therefore, that at the time of the construction of the temple of Dendera, Saturn stood in the sign Virgo, Jupiter in Libra, Mars in Gemini, the Sun, Venus and Mercury in Aquarius and the Moon in Taurus... Every planetary configuration of the kind can be easily calculated. And what was now the result with reference to the date in question? It was not the year 17000 B. C., but *the eleventh of February of the thirty-seventh year A. C., which was the year of the birth of Nero.*" And, in his catalogue of dates (*Summary*, p. 238), he mentions the following in particular:

"A. C. 37, Olymp. 203³, A. U. C. 789.

Feb. 11th: Planetary configuration of the Zodiac of Dendera at Paris, with respect to *Nero's birth*.

April 13th: Planetary configuration of the temple of Dendera in Egypt, previous to *Nero's birth*.

Dec. 15th: Nero born according to both Zodiacs of Dendera."

But Suetonius, the biographer of the Twelve Caesars, states in his *Life of Nero Claudius Caesar* that "*Nero was born at Antium, nine months after the death of Tiberius,*" which Dr. Jarvis, the antipode of Dr. Seyffarth, admits occurred in the consulship of Acerronius Proculus and Pontius Nigrinus, agreeing with Tacitus who affirms in his annals (B. VI. C. XLV) that, when Cneius Acerronius and Caius Pontius entered on the consulship, "it was their lot to close the reign of Tiberius." This consulship of Proculus and Pontius was at one with J. P. 4750 or 37 A. D., contemporary with that part of Sel. 348 and Nab. 784, which contained the primetime of the year. Yet, in spite of this almost universal consensus of opinion, we find a divergence in the definition of this date which is best weighed (and found wanting) when stated in the phraseology of the author. The premier chronologist of the anachronistic school pronounces that "*Nero's birth took place therefore A. J. P. 4749, Ref. Cal. Jul. Caes., 81 A. D. 36; and being in December, it was on the twenty-fifth [fifteenth] day of the eighth month of A. U. C. 789.*" The veteran of the meta-chronistic school delivers himself of the following. "*A. C. 37. Olymp. 203³, A. U. C. 789. December fifteenth: Nero born according to both Zodiacs of Dendera. Suet. Ner. 6 puts Nero's birth later, erroneously, by two years.*" It is difficult to decide which of the two is the more worthy of admiration for cool disregard of the premises.

It will be recognized, however, by every fair-minded seeker after truth that J. P. 4750 or 37 A. D. is beyond all peradventure the only true date assignable for the death of Tiberius. We may, therefore, proceed on this assumption to consider the concomitant events of the times. Of these the foremost are: First, the deposition of Pilate executed by Marcellus, a friend of the governor of Syria, before Vitellius, the governor, could come to Jerusalem himself: consequently, a little more than a year before the death of Tiberius and the Passover during which that death became known to the governor. Second, the deprivation of Caiaphas, the high-priest of pontifical honors and powers. And third, the presence of Paul at this Passover, both to be with Peter and to attend the great feast of the Jewish nation. All these events may reasonably be believed to have occurred, as the historian says, "a year before the death of Tiberius," but, even in that case, we will admit them to have so occurred only when it has been shown

that the preceding year complies with the calendric conditions imposed on them in the proviso of history.

Take, in the first place, the demotion and removal of Pontius Pilate, the high-handed procurator of Judea. Concerning his summary dismissal, Josephus has left the following report (in *Antiq.*, B. XVIII. C. IV. §2): "So Vitellius sent Marcellus, a friend of his, to take care of the affairs of Judea, and ordered Pilate to go to Rome, to answer before the emperor to the accusations of the Jews. So Pilate, when he had tarried *ten years in Judea*, made haste to Rome, and this in obedience to the orders of Vitellius, which he durst not contradict; but before he could get to Rome, Tiberius was dead." Josephus, indeed, seems confused here in his accounts, (how it was possible for Pilate to linger an entire year and a fraction of one on the road to Rome, is absolutely beyond our understanding),—but, whether he really confounds his Passovers or dissects his one into two, so much is certain that, as the narrative now stands, Pilate was not deposed at, or in the course of, the last Passover of Tiberius' life, but a considerable time before the feast. Whether it was weeks or months or even more than a year, we shall have to ascertain from other sources.

Hardly more illuminating is the account of the second event in connection with the date of Tiberius' death. Josephus reports it in the following fashion (*Antiq.* B. XVIII. C. IV. §3): "But Vitellius came into Judea, and went up to Jerusalem; it was at the time of that festival which is called the Passover. Vitellius was there magnificently received, and released the inhabitants of Jerusalem from all the taxes upon the fruits that were bought and sold, and gave them leave to have the care of the high-priest's vestments, with all their ornaments, and to have them under the custody of the priests in the temple. . . . Besides which, *he also deprived Joseph, who was called Caiaphas, of the high-priesthood*, and appointed Jonathan, the son of Ananus, the former high-priest, to succeed him. After which he took his journey back to Antioch."

Now, even if we knew nothing of the negotiations with Artabanus, the king of Parthia, which Vitellius undertook in the interval between the two Passovers mentioned by Josephus, it does not seem probable that the governor of Syria would, at one and the same festival, first give to the acting Pontiff the gorgeous vestments of his office and then divest him of the office itself and turn the paraphernalia over to the subordinate and ordinary priests. On the contrary, it seems inherently probable that, at the first Passover, the magnificent reception accorded Vitellius extended throughout the seven days of the feast, while at the second Passover, Vitellius' participation extended only to four

days. However well-disposed he may have been towards the Jews, his kindly disposition would have appeared unreal and unstable if, at the same festival, and that within the first three days, as in 37 A. D. (cf. *Antiq. B. XVIII. C. V. §3*), he first deprived Joseph Caiaphas of his office, substituting Jonathan, the son of Ananus, and then deposed the scarcely-appointed brother-in-law Jonathan, in order to install his brother Theophilus in his stead. The nature of the case seems to require that there be an intermission of a year at least between the installations of the two high-priestly brothers. At any rate, there appears to be more of a demand for two separate and distinct Passover holidays in the accounts of the depositions and appointments of the high-priests than the report of Pilate's dismissal admitted. Note also how these accounts are held apart by the statements of the historian regarding the governor's departure for home. In the first case, he says: "He also deprived Joseph, who was called Caiaphas, of the high-priesthood, and appointed Jonathan, the son of Ananus, the former high-priest, to succeed him. *After which he took his journey back to Antioch.*" (B IV, §3) In the second mention of the Passover, he says (C. V. §3): "He made a stay there *for three days*, within which time he deprived Jonathan of the high-priesthood, and gave it to his brother Theophilus; but when *on the fourth day* letters came to him, which informed him of the death of Tiberius, . . . *Vitellius truly retired to Antioch.*" According to these accounts of the departures of Vitellius from Jerusalem to Antioch, it seems but natural to conclude that they were two in number, one in 36 A. D. and the other in 37 A. D., the latter upon receipt of the news that Tiberius was dead, the former "a year before the death of Tiberius," when the misconduct of Pontius Pilate brought on a drastic revolution in the affairs of the Jewish church and state.

The most conclusive argument, however, that the year 36 A. D. developed a crisis in the affairs of the Jewish world and the Christian church by the introduction of Saul of Tarsus into communion with Peter and James the Lord's brother, is derived from the description of the time by the apostle Paul himself. It is the statement in his letter to the Galatians (I. 18): "Then *after three years* I went up to Jerusalem to see Peter, and abode with him *fifteen days.*"

Now the mention of *fifteen days* is as peculiarly suggestive of the Passover Season as "fifty" or "seven weeks" is expressive of the Pentecostal period. As "eight days" is indicative of a week comprehended within two "week-ends" or Sabbath-days, so "fifteen days" is inclusive of three "week-ends" or Sabbath-days. The Passover being the chief of the three annual festivals commanded to be kept for eight days or a full week, and moreover

the only one which required a full week of purification, it goes without saying that "fifteen days" points unmistakably to the two-weeks' observance of the Passover season. No other celebration would last that long. For, while we have an example of a seven-days' preparation for Pentecost (in Acts XXIV.), warranting an eight-day observance of that feast-day, it is the prerogative of the Passover alone to require a whole week's preliminary thought and consideration in advance of a full week's jollification to make it a "fifteen days'" celebration. Besides, the Passover was preeminently distinguished and exceptionally signalized as the most important of the public religious festivities. For, while the feast of Tabernacles was ordained and instituted shortly afterwards and the feast of Lights many centuries later, the celebration in Booths partook almost of the nature of Saturnalia, and the feast of Lights was an admittedly extra-canonical and apocryphal institution, which was observed with joy, but not with religious awe and devotion as the Passover. The Passover, however, was ordained from the beginning of Hebrew national life, being the memorial feast of their liberation from Egypt. It was accordingly observed with the deference due the day of their national independence and the freedom of the people. So we cannot go amiss if we assume as a well-authenticated fact, that Saul of Tarsus spent his first three-week-ends' convention "with Peter fifteen days" at the time of the Passover.

Just how this devotional-vacation of Paul with Peter actually appeared will be clear from a view of your calendar on the wall. There is a choice of three calendric positions, according to the place of the last day of the feast, the twenty-first of Nisan, a day before, a day after, or the day identical with the Saturday or seventh day of the week. They will look like this:

Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
						6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21						8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
						7
8	9	10	11	12	13	14
15	16	17	18	19	20	21

Glancing at these positions for a moment, we observe that, if the closing convocation-day, the twenty-first of Nisan (itself invested with the sanctity of a sabbath-day), followed immediately upon a week-day Sabbath (the twentieth of Nisan); this would be a "sixteenth" day, a supernumerary Sabbath day, added on

the head of the sixth, thirteenth, and twentieth days of Nisan, which were all Sabbaths: a contingency excluded by the text. If, in the second alternative the second feast day or convocation-sabbath (Nisan twenty-first) fell on a Friday, that is, on the day before the regular week-day Sabbath, this fact might influence many pious pilgrims not to start out on their homeward journey on that day, but to tarry over the twenty-second of the month at Jerusalem: for, after all, the three week-ends designated the eighth, fifteenth, and twenty-second of Nisan include and constitute but "fifteen days". Finally, if, as in the third instance, the closing convocation-day of the feast (Nisan twenty-first) was identical with the regulation Sabbath of the week, this actual consolidation of two Sabbaths would represent as close a correlation of "fifteen days" inclusive of the Pascal holiday week as it was possible for these calendric units to be. Not being informed by the apostolic chronicler which of the latter two alternatives obtained, we will permit the seriation of the calendar cycle to decide that point. So, abjuring every attempt at juggling figures or manipulating factors to suit our ends, we proceed to calculate the date of Paul's sojourn "with Peter fifteen days," beginning from the close of the fourth nineteen-year cycle of the Vth Calippic Period, or the beginning of the first Metonic of the VIth Calippic Period, in the spring of J. P. 4745 or 32 A. D.

If we begin at the beginning and add up all the days elapsed in the Asmonean-Herodian Era up to date, we have:

Cal. Per. III ¹	(Sel. 148—153 or	165—160 B. C. =	1923 days.
Cal. Per. III ³	(Sel. 154—172 or	159—141 B. C. =	6940 days.
Cal. Per. III ³	(Sel. 173—191 or	140—122 B. C. =	6940 days.
Cal. Per. III ⁴	(Sel. 192—210 or	121—103 B. C. =	6940 days.
Cal. P. IV ¹⁻⁴	(Sel. 211—286 or	102— 27 B. C. =	27760 days.
Cal. P. V ¹	(Sel. 287—305 or	26— 8 B. C. =	6940 days.
Cal. P. V ²	(Sel. 306—324 or	B. C. 7— 12 A. D. =	6939 days (!)
Cal. P. V ³	(Sel. 325—343 or	13— 31 A. D. =	6940 days.

71322 days.

Or, if we prefer to count from the latter end, we may add:

Cal. P. V ⁴	(Sel. 344—362 or	32—50 A. D. =	6940 days.
Cal. P. VI ¹	(Sel. 363—381 or	51—69 A. D. =	6940 days.
Cal. P. VI ²	(Sel. 382 or 70	=	128 days.

14008 days.

Subtracting these last 14008 days from (71322+14008=) 85330, the sum total contained in the Jewish-Roman Era, and we obtain again 71332 days, as the number preceding the starting-point of our next calculation.

Computing the number of days in the latter period in terms of the Julian calendar, we have (A. D. 69-31=) $38 \times 365 = 13870$, plus nine bissextiles and the 218 days in 70 A. D., equal to 14097 days, or $(14097-14008=)$ 89 days from the first of January to the thirtieth of March, 32 A. D. With this correlation to begin with, we proceed to visualize the years of potential happening.

	<i>Jewish</i> ..	<i>Julian.</i>	
71322	71322 ..	89	89
21	30	30	21
1. Sel. 344 =	1	1	
7)71343	324	324	110 =
10191+6			G Fri., April 20
		444	
		-365 d. in 32 A. D.	
71677	71677 ..	79	79
21	30	30	21
2. Sel. 345 =	1	1	
7)71698	324	324	100 =
10242+4			F Wed., April 10
		434	
		-365 d. in 33 A. D.	
72032	72032 ..	69	69
21	177	177	21
3. Sel. 346 =	30	30	
7)72053	177	177	90 =
10293+2			E Mon., Mar. 31
		453	
		-365 d. in 34 A. D.	
72416	72416 ..	88	88
21	30	30	21
4. Sel. 347 =	1	1	
7)72437	324	324	109 =
10348+1			DC Sun., April 18
		443	
		-366 d. in 35 A. D.	
72771	72771 ..	77	77
21	177	177	21
5. Sel. 348 =	30	30	
7)72792	177	177	98 =
10398+6			Fri., April 8
		461	
		-365 d. in 36 A. D.	B
73155	73155 ..	96	96
21	354	354	21
6. Sel. 349 =			
7)73176		450	117 =
			A

		<i>Jewish .. Julian.</i>		
			—365 d. in 37 A. D.	Thurs., Apr. 27
10453+5		73509 ..	85	85
73509		354	354 d. in Sel. 350	21
21	7. Sel. 350			
7)73530			439	G 106=
			—365 d. in 38 A. D.	Mon., April 16
10504+2		73863 ..	74	
73863		73863 ..	74	74
21		177	177	21
7)73884	8. Sel. 351 =	30	30	d. in Sel. 351
		177	177	95=
10554+6			458	FE Fri., April 4
			—366 d. in 39 A. D.	
74247		74247 ..	92	92
21	9. Sel. 352 =	354	354 d. in Sel. 352	21
7)74268			446	D 113=
			—365 d. in 40 A. D.	Thurs., April 23
10609+4		74601	81	
74601		354	354 d. in Sel. 353	
21	10. Sel. 353 =			C
7)74622			435	
			—365 d. in 41 A. D.	
10660+2		74955 =	70	70
74955		30	30	21
21		1	1	
7)74976	11. Sel. 354 =	147	147	d. in Sel. 354
		30	30	91=
10710+6		177	177	Fri., April 1st
			455	B
			—365 d. in 42 A. D.	
75340		75340 ..	90	90
21	12. Sel. 355 =	354	354 d. in Sel. 355	21
7)75361			444	AG 111=
			—366 d. in 43 A. D.	Fri., April 20
10765+6		75694 ..	78	

From this conspectus of the years considered by one biblical scholar or another as affording a date for the first visit of Paul to Jerusalem and, in particular, to Peter, the outstanding representative of the Christian community at that time, we learn two important lessons. The first observation we wish to make, on the strength of these running computations, is this, that within the radius of five years which can at all come within the scope of being a "fourteenth" year previous to Paul's *third* visit to Jerusa-

lem, there is only one year that can possibly be regarded as meeting the requirements of a trenchant date, the 4749th year of the Julian Period or the year of the Christian Era 36 A. D. While there are other years outside of this range the calendric features of which would admit of selection equally well (such as 32 A. D. and 42 A. D.), only 36 A. D. presents a Passover season from the eighth to the twenty-second of Nisan which begins and ends with a Sabbath-day, to wit, the two weeks bounded by Saturday, the twenty-sixth of March, and Saturday, the ninth of April. And being "three years" or so subsequent to St. Paul's conversion, it cannot but be the true year of Paul's abiding with Peter "fifteen days."

The other important lesson to be derived from this survey of the years purporting to convey the date of Paul's first visit to Jerusalem as a Christian, is this, that at the rate we were going, we neither added nor subtracted any item of time employed in the construction of a would-be Jewish calendar. The interpolation of a single day, under the name of "Badhu," in the interest of shifting the Crucifixion Passover a day forward or back, is what we are most afraid of. To demonstrate, therefore, that no such expedient has been attempted in this work, we shall prove that the twelfth year of the current nineteen-year cycle of the Vth Calippic Period ends where it should end, to wit, on the seventy-eighth day or the nineteenth of March, 44 A. D. This may be seen from the following examples in arithmetic.

Cal. P. V. Met. Cycle 4, Year 13	(Sel. 356	or 44	A.D.) = 354 days
Cal. P. V. Met. Cycle 4, Year 14	(Sel. 357	or 45	A.D.) = 384 days
Cal. P. V. Met. Cycle 4, Year 15	(Sel. 358	or 46	A.D.) = 354 days
Cal. P. V. Met. Cycle 4, Year 16	(Sel. 359	or 47	A.D.) = 384 days
Cal. P. V. Met. Cycle 4, Year 17	(Sel. 360	or 48	A.D.) = 354 days
Cal. P. V. Met. Cycle 4, Year 18	(Sel. 361	or 49	A.D.) = 354 days
Cal. P. V. Met. Cycle 4, Year 13	(Sel. 362	or 50	A.D.) = 384 days
<hr/>			
2568 days			
Cal. P. VI. Met. Cycle 1, Year 1-19	(Sel. 363-381	or 51-69	A.D.) = 6940 days
Cal. P. VI. Met. Cycle 2, Year 1	(Sel. 382	or 70	A.D.) = 128 days
<hr/>			
9636 days			

Deducting these 9636 days, which form the balance of the Asmonean—Herodian Era, from the total amount, which is 85330 days, we obtain the sum of 75694 days as the number elapsed at the end of our computation, just as it emerged from the longer process of computing year by year. As this serial number is unalterably fixed in its proper place and fortified beside by immovable termini forward and back, so every attempt to transplant any one of the preceding days, whether it be an ordinary or an extraordinary intercalary day, entails the obligation to

show cause and reason why this should be done and where it should be executed. This being a very difficult, if not impossible thing to do, we may conclude that the dates we have determined must be historical and actually correct. The first visit of Paul to Jerusalem and his stay "with Peter fifteen days" was an event of the year 36 A. D.

Having thus, as it were, called heaven and earth to witness, that J. P. 4749 or 36 A. D. was the year in which Saul of Tarsus first repaired to the Holy City as a convert to the Christian faith, abiding with the pillars of the Church, Simon Peter and James, the Lord's brother, "fifteen days," it is needless to inquire whether or no this date accords with the calendar alleged to have been in use in those days. All that need be accentuated now is the inadvisability of attempting to force a different arrangement of days for the space of a few, that is, eight years, by the arbitrary introduction of an additional intercalary day. A fifth extraordinary intercalary day would be wholly inadmissible, as there is no room for one in the scheme of time, and a change of schedule would only create another problem as to the proper disposition of days for which we had no warrant. At the utmost, the fourth day of complementation might be shifted about to one or two other places, but none of these vacillations would produce a more satisfactory result. We may therefore rest our labors here, content if not entirely satisfied, with the reflection that, if others are indeed able to give of their abundance, we have at least given all that we had.

Summing up the results of our researches so far, we have ascertained the most probable location of all the embolismic months (seven in number) and of all the extra intercalary days (four in number) postulated for the completion of every nineteen-year lunar cycle, to have been as follows: The seven intercalations of a month took place in the third, fifth, eighth, eleventh, fourteenth, sixteenth, and nineteenth years of the cycle; the four intercalations for a day occurred in the first, second, fourth, and eleventh years of every cycle. Accordingly, if we resume the symbolism of architectural construction, we may complete the figurative representation of an ancient Metonic Cycle at the conclusion of the present date-determination. We have said before this that a lunar nineteen-year cycle might be likened to a nineteen-story building of steel and concrete construction, which, being reared from the ground up, might be filled in, so far as the facial appearance of the edifice is concerned, with a variety of material as well as a diversity of features, all with a view to demarcating the lineaments and outlines of the nineteen lunar cycle. Thus we have already determined that the lower half of the building should correspond with the lower hemisphere of the

cycle in the verisimilitude of simplicity, solidarity, and rugged, unadorned strength. Having none of the refinements of single day intercalations, the lower half of the cycle should reflect none of these in the ornamental fixtures or features of architectural adornment. From the eleventh to the last (nineteenth) cyclical year, there should be a rough or plainly polished facing of hard stone or granite, broken only by courses of stone to indicate the solid month intercalations in the eleventh, fourteenth, sixteenth, and nineteenth years of the cycle. Immediately above the sill course of the eleventh story, there should be a very thin fillet of inlaid moulding, to represent the fourth and last of the single-day intercalations executed in the upper half of the lunar cycle. The other three flat and very narrow members of ornamental molding should be inserted near the tops of the first and second stories (counting from the top), and, after an intermission of a capital-like course of stone in the third story, the third fillet near the top of the fourth cyclical story. The intervening friezes between the sill courses of the third, fifth, eighth and eleventh floors of the edifice may suggest the presence of the greater number of complementary devices in this hemisphere by the addition of sculptured ornaments and mural decorations, but, to prevent the possibility of misinterpreting them, it may be best to omit all embellishments of architectural art and be content with a flat facing of hard-burnt or hydraulic pressed brick. Such an edifice, if characterized as described, would doubtless be of great assistance in the understanding of the structure of a Metonic cycle (of course, only of a faulty Metonic cycle as used and abused in the renaissance period of Jewish history.) The structure is now complete.

VOLUME V. CHAPTER II

CONVERSION OF CORNELIUS AT THE PENTECOST OF THE GENTILES

The first acknowledged attempt of the first disciples of Jesus to comply with His command to go forth from Judaea and preach the Gospel to all creatures, and so to inaugurate the general evangelization of the whole world, took place no less than twelve twelvemonths after the crucifixion of their Lord and Master. It may seem unbelievable that men, having understood their instructions in that sense, and having developed a sense of duty to fulfill that obligation, should have tarried at Jerusalem so long before they could bestir themselves to travel even the seventy miles to Caesarea in order to commence there the preaching of the Gospel to the Gentiles, but such is the best tradition in regard to that subject.

We may be tempted to doubt the authenticity of such texts, or the reality of such facts, as those which purport to convey the great commission to evangelize the world (Matth. 28:19) or to report the precept and practice of the Lord relating to communication with non-Israelites (Mark 7:27), in the endeavor to extenuate and excuse the dilatory conduct of the apostles, but the fact remains just the same that it was at least a full dozen of years before they burst from the shell of Jewish exclusiveness sufficiently to get in touch with the first representatives of the heathen world. This fact may be easily substantiated.

Among the arguments urged in favor of the date for the Crucifixion, the Catholic Encyclopaedia (art. *Jesus*) enlists the Conversion of Cornelius, or the inauguration of the apostles' preaching to Gentiles, as having occurred twelve years after the Crucifixion of Christ, consequently in the year of grace 41 A. D. In the same source-book of ecclesiastical tradition, F. Bechtel gives honorable prominence to Baronius, who, in his *Annals* ad an. 41 notates at this year the conversion of Cornelius and the extension of church activities to the Gentiles. In his *Fasti Apostolici*, p. 137, Rev. Anderdon declares: "The true opinion, according to Henschenius and the Bolandist (ad Jul. 15), supported by Usuard, who quotes S. Bede, and by Peter de Natalibus, seems to be that the Apostles dispersed in A. D. 40 (vulg. [41]), i.e. the twelfth year after the Lord's Ascension." In perfect accord and consensus of opinion with the foregoing Roman Catholic authorities, Archbishop Ussher of the Anglican or Protestant

Episcopal Church propounds in his own system of chronology the same year A. D. 41 for the conversion of Cornelius as a representative proselyte from a pronouncedly heathen nationality, as we may convince ourselves by a flitting glance at the margin of King James' Version of the Bible.

If, then, we are tempted, at the first intimation of the long duration of apostolic indifference and untowardness to the Gentiles to doubt or disbelieve the possibility of its being correctly dated, we are yet compelled, by the frank statement of facts by the author of the Acts, to admit the possible truth of the emplacement, when we consider that, more than another dozen of years later, consequently after a quarter of a century of the church's existence, it was still a matter of grave concern to pious Jews that St. Paul had been caught redhanded in the act of "teaching all the Jews which were among the Gentiles to forsake Moses," just as if the originally ordained disciples and apostles at Jerusalem had never been wont to do such a thing. Hence it is evident that, however much we may regret to admit the retrogression of the philo-judaic apostles, it is a fact which must be reckoned with as a real, stubborn matter of historicity, so that the only question is, How does this real psychological phenomenon comport with the psychology of the times? Or in other words, *How*, and *when*, did the extremes of ethnical antipathy meet, and, blending into harmony, reconcile Jewish and Gentile emotion? Regarded in this light, the conduct of the apostles becomes a factor of great chronological value, for it is then hooked up with one of the great commotions of Jewish-Roman history, which has altered and directed the destiny, not only of a few insignificant individuals, but of great nations and peoples, even of all humanity itself.

The eventful commotion of which we speak; namely, the mutual attraction and gravitation of the heathen and Hebrew worlds to each other, resulting in the world dominion of those non-Israelitic or aryan nations which accepted the modified Judaism offered them on this occasion, may be said to have occurred upon the demise of the Roman emperor commonly known as Caius Caesar Caligula. It was this young autocratic, despotic ruler who gave such impetus to the movement of Caesar-worship that its very impact produced a recoil with a kick like pandemonium. The specific act of the young successor to the empire of the deified Caesars was this, that he insisted on a recognition of his right to all the titles and terms of honor which had been conferred upon his ancestors and, by process of Roman inheritance laws, upon himself. From the Roman point of view, he was entirely within his rights as to his heritage, but from the Jewish standpoint, as wholly in the wrong. According to the

latter's understanding of their God-given Mosaic law, no monarch, prince, or potentate, or any other man for that matter, was entitled to the epithet "the god," "the divine," or "the son of the God" (*divi filius*), no matter how illustrious his character or his achievements might have been. But against this prejudice of the Jews it was that Caius Caligula determined to carry on a war of suppression and annihilation. Exasperated by the information furnished by Apion, the inveterate anti-Semite of Alexandria, that the Jews were the only people that refused him his divine honors, Caligula resolved then and there to enforce his demands with flaming sword and fagot.

This ebullition of overweening vanity on the part of the emperor, which rebounded with such powerful recoil and rebounded with such miraculous reaction to the greater glory of God and the greater good of humanity, occurred near the very zenith of his reign, the middle of his third regnal year, the third consulate administered by himself alone; for the Jewish historian relates at length that, after Caius had managed public affairs with great magnanimity during the first and second year of his reign and had behaved himself with such moderation, that he gained the good-will of the Romans themselves, and of his other subjects; that, after the incitation of Caligula's anger by the charge of certain Greeks of Alexandria that the Jews alone were neglecting the honors that belonged to him as Caesar, he gave orders forthwith to Petronius, the president of Syria, to make an invasion into Judea for the purpose of placing his statue in the temple of God; that Petronius, making haste to obey Caesar's epistle, came to Ptolemais and there *wintered* (near the end of his third regnal year), as intending to set about the war *in the spring*; that, when Petronius saw that, without a war, he should not be able to be subservient to Caius in the dedication of his statue, he hastened to Tiberias, as wanting to know in what posture the affairs of the Jews were; that here, at Tiberias, many myriads of Jews met Petronius again, throwing themselves down upon their faces, and stretching out their throats, ready to be slain; that they did this *for forty days* together according to the *Antiquities*; or, according to the *Wars*, *for fifty days*; that, upon the land lying without tillage and continuing unsown, the country was in danger of going under the hammer for its inability to pay tribute and taxes, and the season for ploughing and sowing was fast slipping away. Upon the earnest solicitation of king Agrippa, Petronius sent a letter incorporating a prayer for mercy to the emperor, employing the ordinary means of transportation of those days and therefore consuming the greater part of Caligula's fourth and last year's autumn in the dispatch and delivery of this letter. The vessel bearing the instant reply of the emperor met

with all the adversities of winter voyaging; for the historian says that "those who brought Caius' epistle were tossed by a storm, and were detained on the sea *for three months*"; consequently for the entire storm period on the Mediterranean Sea from the fourteenth of December to the thirteenth day of March, when travel by water was resumed with safety and the letter of Caius was at length delivered. But this letter of condemnation was not disposed of until twenty-seven days after the news had arrived that Caius had died (January twenty-fourth); hence, if the summons to give an account of himself was received by Petronius at least a week or a fortnight after the astounding precipitation of rain which usually fell about the end of February or the beginning of spring, the letter of deliverance from the lion's mouth was received about the middle of March or the beginning of Nisan Sel. 353.

It follows, then, that whatever great awakenings of Jewish and Gentile generosity took place upon this auspicious turn of events, occurred after the Passover and about the time of the Pentecostal season of the year that brought about the death of Caius Caligula and the return of Petronius, the governor of Syria, to Antioch, his capital city. It is clear, too, that the occurrences which culminated so marvellously in the bringing out of a new spirit of mutual understanding and the mutual undertaking of philanthropic work and the evangelistic conquest of the world, resulted in a higher display of reverence for the divine agencies employed in the production of this result, being events of singular significance and extraordinary impressiveness. What display or public expression of the will of the Jewish people and the voice of the Hebrews' God, for instance, could have been more impressive to a pagan bystander and eye witness than the popular demonstration of devotion to their convictions presented by the Jews during the seed-time of the previous year? For Josephus tells us that, when both at Ptolemais and Tiberias the Jews pleaded with Petronius, the president of Syria, "they threw themselves down upon their faces, and stretched out their throats, and said they were ready to be slain; and this they did *for forty days* together, and in the mean time left off the tilling of their ground, and that while the season of the year required them to sow it" (Jos., *Antiq.* B. XVIII. C. VIII. §3). Could faith and fidelity go further than this to evince and vindicate its utmost sincerity and truth?

If to this only human, but divinely exalted manifestation of intrinsic worth be added the evident approval of divine Providence, could there be a recommendation of the Jew to the Gentile more potent? There was the obvious intervention of the deity particularly in behalf of the Jewish people in the precipitation of

a copious rain just when, after a year-long drought, it seemed as if nothing in heaven or on earth could prevent the ruin of the country. The majestic theophany in the shape of torrential showers was in itself regarded as a distinct revelation of the god-head's preferential relation to the Jewish nation, designed to distinguish and designate them as the people with a mission to the rest of mankind. Was it not the most substantial and palpable evidence, not only of God's existence, but of His being a friend and father to the Jews above all others?

Finally the consummation of their salvation from the wrath of the "godlike" ruler was a dispensation of Providence no less marvellous than the most miraculous deliverance reported in their ancient records. For when, after all the foregoing events and incidents, entailing weeks and months of waiting in agonizing suspense and pain, Petronius had dared to challenge the ire of Caius by his intercession for the Jews, and had practically defied him to do his worst because of his insubordination, the impious command of the all-powerful emperor was so overruled by the forces of nature under the will of God that the ship which carried his baleful epistle "sailed so slow, that other letters came to Petronius before this, by which [other letters] he understood that Caius was dead. . . . But it happened," so the historian tells us, "that those who brought Caius' epistle were tossed by a storm, and were detained on the sea *for three months*, while others that brought the news of Caius' death had a good voyage. Accordingly, Petronius received the epistle concerning Caius, *seven and twenty days* before he received that which was against himself." (Jos., *Wars*, B. II. C. X. §5) Is it to be wondered that the men of that day descried the workings of divine Providence in these happenings? Hence the historian concludes (*Antiq.* B. XVIII. C. VIII. §9): "Therefore Petronius rejoiced at this coincidence as to the death of Caius, and admired God's providence, who, without the least delay, and immediately, gave him a reward for the regard he had to the temple, and the assistance he afforded the Jews for avoiding the dangers they were in."

Now, into this atmosphere of reverence for the God of Israel and of decided deference to the Jewish people, chronologists in general place the mission of St. Peter to Cornelius. If St. Peter's mission had been directed to Petronius instead of Cornelius, the change of persons as the beneficiaries would not have surprised us: for the environment would still be the same. But it was not Petronius who was elected of God to act as representative of the Gentile world in its first contact with the Christianized Jewish world. It was an obscure subordinate officer of his command, who as captain of a century of Roman soldiers was stationed at Caesarea, when Petronius himself withdrew from (Ptolemais or) Tiberias

to Antioch. This certain centurion Cornelius was, or had become, like Petronius, a god-fearing man, being profoundly impressed by the preternatural phenomena of the past twelve months under his own observation and experience.

Cornelius belonged, as the author of the Acts of the Apostles tells us, to that contingent of Syrian troops which, in contradistinction to the Oriental auxiliaries and the legionaries derived from other provinces, was called "the Latin band," indicating by this distinctive appellation that the members of this famous organization belonged to that great and illustrious people who, at that time and for ages before and after it, dominated all of the then-known world and dictated the destinies of nearly all the nations and kindreds and tribes of the human race. To this remarkable people belonged both Petronius and Cornelius. Yet, while both were eligible for the distinction of being a representative of that great people, it is significant that the call of Heaven to represent his people and, through his people, all the tribes and families of mankind, came not to the great and powerful Petronius, the commander-in-chief of two legions of Roman soldiers, but to the lowly-minded and humble Cornelius, the leader of barely a hundred men. Cornelius, like Petronius, had become "a devout man, and one that feared God with all his house." Being an officer of the army stationed in the land of Israel, he had been a close bystander and observer in the enactment of the scenes just described, and, being mightily impressed with the manifestations of Providence as he saw them, he sought God in fasting and prayer *for four days*. These *four days* of ritual preparation for a divine blessing may be more closely defined when we remember that the occasion of the conversion of Cornelius is also called the Pentecost of the Gentiles. As the Jews or men of Jewish nationality had had their Pentecost *twelve years before*, so the Gentiles or men of Aryan birth came into their own in this year of mutual concessions, viz. of greater liberality by Gentiles, to the Jews, and of greater generosity by the Jews to the Gentiles.

That the time of this wonderful change in the relation of nationalities was really the feast of Pentecost, may be gathered from at least ten points of similarity and contact with other Pentecosts of history. Compare, for instance:

1. The donation of alms,	in Acts X. 2	vs. Acts XXIV. 17.
2. The abstention from meat,	X. 14	vs. XXI. 25.
3. The aloofness of the Jews,	X. 28	vs. XXI. 28-9.
4. The exclusion of Gentiles,	X. 28	vs. XXI. 28.
5. The meeting of multitudes,	X. 27	vs. XXI. 22.
6. The mention of God's commandments,	X. 33	vs. XXI. 28.
7. The allusion to the Crucifixion,	X. 39-40	vs. II. 23.
8. The remission of sins,	X. 43	vs. II. 38.
9. The giving of the Holy Ghost,	X. 44	vs. II. 33.
10. The baptizing of converts,	X. 47-8	vs. II. 41.

No replica of a picture can be more perfect than this duplication of the Pentecostal stories of the New Testament. There is the same psychology in the observances of the day, and the same spirit in the actions of the observants. Itself a celebration of the giving of the law and the commandments, as it was ordained of old and maintained for ages, this solemn feast of the fiftieth day after the Passover as it was celebrated at that time in Caesarea, was in no way different from other solemnizations of the feast. There is only one important element of difference between the Pentecostal accounts of Acts II and Acts X, and that is the distinguishing feature of the occasions—the participants in the act, the beneficiaries of the feast, are Gentiles.

So Cornelius, being a Gentile, and not one of God's holy people, considered it necessary to prepare himself properly for his own participation in the observance of the day. *Four days before* the memorial feast, Cornelius addicted himself to fasting, and, addressing his prayers to the God of Israel, entered seriously upon the ceremonies of purification and ritual cleansing. Now these "*four days*" of ceremonious preparation for the feast may be further analyzed as consisting of one day of inaction and three days of activity. The latter, being a prolonged period of busy days—days of travel, days of doing things, days devoted to the transaction of business—cannot have included a Sabbath, but may very well have been preceded by a day of rest, on which the centurion's men would not even begin a journey. If such was the case, and such was the reason for Cornelius' not sending off his messengers on the first of the four days, we have here the calendric condition under which the Pentecostal count of that year came to a close. The Feast, though itself considered a Sabbath, was located in the middle of a week, three days having gone before, and a regular Sabbath having preceded them.

If, then, the *fourth* day before the meeting of Peter and Cornelius was a regular seventh-day Sabbath (or Saturday), the *third* was a first day of the week (or Sunday), the *second* of the series the second day of the week (or Monday), and the *first* of the count was the third of the week (or Tuesday), while the day itself on which the speaker remarked the passage of time, was the fourth day of the week (or Wednesday) and, in this case, "Pentecost fully come." And since the feast of weeks in those days was not more moveable than the lunar calendar would permit, it fell invariably on the sixth of Sivan, as a rule the "fiftieth" day after the Passover: hence its name, which always meant "*fifty*," not fifty-four or so-and-so many more. But fifty days after the Passover is the $(15+50=)$ 65th day of the ecclesiastical or sacred year, the sixth of Sivan or Daesius. Consequently the sixty-fifth of Sel. 353, the sacred ecclesiastical year correspond-

ing to the greater part of A. D. 41, should fall on a Wednesday, or the fourth day of the week. In other words, the conditions to be met by the almanac of the Seleucid year which witnessed the miraculous deliverance of Petronius and his proteges from the wrath of Caligula, the emancipation of Peter and other apostles from the narrow, nativistic type of Judaism, and the conversion of Cornelius and his household to the more liberal and expanded form of Judaism or Christianity, are just these, that, without changing or rearranging the component parts of either calendar or cycle, the specified dates shall fall upon the specified days of the week, as indicated and required by the order of history. We mean by that, that every part and parcel of the whole transaction must happen so unostentatiously, and yet withal so ostensibly without planning or scheming, or evident desire to direct or regulate, that it must indeed have been the true happening. So then, the question is, Are the conditions thus stipulated frankly met by the calendar we have proposed for the year in which Caius Caesar Caligula was slain?

The year of Caligula's death is commonly known, in Roman chronology, as the consulate of C. Caligula IV. and Sentius Saturninus. and the day of his killing is given by Suetonius and Dion Cassius as the twenty-fourth of January, Jul. Cal. 86. This date is ascribed by the majority of chronologists to J. P. 4754 or 41 A. D. Since, however, it is also assigned with a show of much assurance to 40 A. D. by men like Dr. Jarvis, Page, and Totten, and with no less a display of faith by men like Dr. Seyffarth to 42 A. D., we shall go to the pains of ascertaining for ourselves which of these three years conformed freely and fully with the conditions propounded by sacred and secular history. Since 40 A. D. is the ninth year of the twentieth Metonic cycle of the Calippic Period (Cal. P. V. ⁴), we may compute the end of Sel. 351 (hieratic) in the spring of 40 A. D. either from the beginning or from the end of the Asmonean-Herodian Era. Taking the latter course as the shorter and safer, involving one complete (the twenty-first) Metonic cycle, the 128 days of the twenty-second (all located in 70 A. D., and the eleven full years of the twentieth nineteen-year cycle from Sel. 352 to 362 (or 40 to 50 A. D.) [including four embolismic months and one extra-intercalary day in 42 A. D.], we add together:

$$\begin{array}{rcl}
 1.) & 354 \times 11 & = 3894 \\
 & 30 \times 4 & = 120 \\
 & 1 \times 1 & = 1 \\
 2.) & \text{Sel. } 363 - 381 & = 6940 \\
 3.) & \text{Sel. } 382 & = 128
 \end{array}$$

11083 ds.

Deducting this amount from the sum total of days in the As-monean-Herodian Era, we have $85330 - 11083 = 74247$ days as the number of diurnal units to have elapsed previous to our present point d'appui (see also p. 490, preceding chapter). Or, computing the distance from this point to the final termination of the Era side by side with the calculation of this period in terms of the Roman chronography, we state it thus:

	<i>Jewish</i>	<i>Julian</i>
	354×30 (Sel. 351–381)	365×30 (39–69 A. D.).
	<hr/> 10620	<hr/> 10950
	330 d. in 11 emb. mos.	7 l. y. ds.
	5 d. extra. int.	<hr/>
	<hr/> 10955	<hr/> 10957
Sel. 382 =	128 d. in 70 A. D.	218 d. in 70 A. D.
	<hr/> 11083 d.	<hr/> 11175 d.
		<hr/> –11083 d.
		<hr/> 92 d. in 40 A. D.

Hence the correlation: 74247 . . 92d. in 40 A. D. Adding year to year, both in the Jewish and Julian mode of reckoning, the facts of history will appear in the form of figures, like this:

	<i>Jewish</i>	<i>Julian</i>	
74247	74247 ..	92	92
+ 65 9.) Sel. 352 =	354	354 d. in Sel. 352.	+65
7)74312		<hr/> 446	<hr/> 157 =
		–365 d. in 40 A. D.	Sat., June 6
10616+0		<hr/>	
74601	74601 ..	81	81
+ 65 10.) Sel. 353 =	354	354 d. in Sel. 353	+65
7)74666		<hr/> 435	<hr/> 146 =
		–365 d. in 41 A. D.	Wed., May 26
10666+4		<hr/>	
74955	74955 =	70	70
1	30	30	1
65	1	1	65
11.) Sel. 354 =	147	147	
7)75021	30	30	136 =
	177	177	Mon., May 16
10717+2		<hr/>	
		455	
		–365 d. in 42 A. D.	
75340	75340 ..	90 d. in 43 A. D.	90
65			+65
7)75405			<hr/> 155 =
			Sun., June 3
10772+1			

Upon the presentation of these facts and figures, there is no other but purely supererogatory work to be done. Even that small modicum of effort may be reduced to the minimal remark that only 41 A. D. presents the features of calendric arrangement required by the biblical narrative. According to the Jewish, or Syro-Macedonian calendar, the sixth day of Daesius (or Sivan), the festival of Pentecost, was the fourth day of the week, or, to be precise, the fourth day of the 10667th week of the Asmonean-Herodian Era. According to the Julianized Roman Calendar, the 146th day of the eighty-sixth year of Julius Caesar's Calendar was a Wednesday, Cal. C, being May twenty-sixth, J. P. 4754 or 41 A. D.

VOLUME V. CHAPTER III

THE TUMULTUOUS PASSOVER OF CUMANUS, ST. PAUL'S ATTENDANCE ON FIRST APOSTOLIC COUNCIL IN 50 A. D.

The next specimen of dates available and suitable for the testing of a calendar scheme purporting to be a reproduction of the Jewish instrument used at the time of Jesus of Nazareth, Josephus, and St. Paul, for the reckoning and regulation of time, is one of apparent vagueness and indistinctness upon first sight, but nevertheless one of astonishing strength and firmness when once defined and verified. It is introduced by Josephus (*Antiq.* B. XX. C. V. §2) as taking place in the quadriennium between the eighth and the twelfth year of the reign of Claudius, "while the Jewish affairs were under the administration of Cumanus," "when that feast which is called the Passover was at hand, at which it is our custom to use unleavened bread," and, in particular, "on the fourth day of the feast," which, in terms of the Jewish (or Syro-Macedonian) calendar, was the eighteenth day of Xanthicus or Nisan.

At first sight, as we have said, it might appear as if the lines of demarkation in this case were rather vague and undefined; nevertheless, with the aid of Tacitus, the Acts of the Apostles and the Epistle of Paul to the Galatians, it will be seen to be one of surprising solidarity and strength. Beside being limited to the administration of Ventidius Cumanus as procurator of Galilee, Samaria and Judea, and to that of Ummidius Quadratus as governor general of Syria, it is further restricted to the consular year when Ituraea and Judaea, by the death of Sohemus and Herod Agrippa became mere adjuncts to the province of Syria, that is to say, "in the same consulship," and to the twelvemonth preceding the consulship of Claudius V. and S. Cornelius Orphitus, when certain seismic shocks and earthquakes were numbered among the portents and prodigies of the year (see *Annals* XII. C. XLIII and *Acts* XVI. 26). This momentous consular term is, of course, very firmly fixed in the official succession of consuls, as we shall presently show; but, to the biblical student, it is the Epistle of Paul to the Galatians (II. 1) which gives the real and direct point of precision to this date. For "*fourteen years*" after

the first progress of Saul or Paul to Jerusalem, which took place in the spring of 36 A. D., was precisely this same year, which has been thus imperfectly pointed out, J. P. 4763 or 50 A. D., as the unquestionable time of occurrence of the panic-stricken Passover of Cumanes and the epoch-making First Apostolic Council.

In due consideration of the fact, however, that the date of these events, both intimately connected with the third visit of Paul to Jerusalem, are diversely placed by divers chronological authorities, viz. by Lewin in 48, by Petavius in 49, by DeWette and Smith's Dict. Bib. in 50 or 51, by Ussher in 52 A. D.; and, in further view of the fact that, at this point of history, all the events of the day are located a whole year higher up by the school of Jarvis, Page, Totten, and others, while Dr. Seyffarth and his following place all events and incidents a year lower, it is at least desirable if not exactly necessary to repeat here the arguments corroborating the common reckoning of the majority of chronologists, vindicating the choice of the year indicated as the true date of the occurrences mentioned in the superscription.

There is, in the reign of Claudius, at least one irrefragible and impregnable date from which there is no possible getting away in candor, the astronomical phenomenon known as the lunar eclipse of December thirty-first, 46 A. D. The occasion for mentioning this particular occultation of the moon was the simultaneous upheaval of an island in the Aegean sea, near Thera, as it were in the shadow of this remarkable eclipse, which Seneca says occurred in the consulship of Valerius Asiaticus (*Nat. Ques.* Lib. III, C. 26), but which Dion Cassius asserts (ap. Xiphilinum *H. R. B.* IX, C. 27) happened in the consulate of Claudius IV and L. Vitellius III. Even the anachronistic school of Dr. Jarvis, Page, and Totten agree to the fact: "No eclipse of the moon can be produced corresponding with these accounts but that of December thirty-first, 46 A. D." Notwithstanding this admission, they then assign the event to the last day of the consulship of Claudius and Vitellius, which is possible only through the summary removal of Asiaticus and Silanus and the arbitrary moving up of Claudius and Vitellius. This transposition is effected, not only to the detriment of this one consulate, but in violation of the list of consuls which demands that there should be an eclipse of the sun in the consulate of C. Vipstanius Apronianus and L. Fonteius Capito on the thirtieth of April of their term, of which, however, the administration is deprived by its removal to a preceding year. (See Tac. *Ann.* XIV. C. 1, §12; Pliny, *N. H.*, B. II, C. 72.) For this attempted anachronism of Dr. Jarvis, therefore, as well as for the proposed metachronism of Dr. Seyffarth, there exists not a vestige of justification. There is, and can be, only one contingency in which the consular terms of Asiaticus and Silanus and of Claudius and Vitellius can both include the date of this notable obscuration,

and that is the arrangement dictated by history, to wit, that the abdication-day of M. Junius Silanus and Valerius Asiaticus II. and the inauguration-day of Claudius IV and Vitellius III were one and the same, in other words, were identical and consolidated in and on the thirty-first of December A. D. 46. The two consulates, therefore, united in witnessing the joint phenomena of sky, earth, and sea, in the closing month of the sixth regnal year of Claudius Caesar, and initiated that block of consular annals in which the Roman historian records those many little incidents which are of such vital importance to Christian Church chronology. The consulates thus involved in the revolutions of the world's major planets are the following:

<i>A.U.C.</i>		<i>Consuls</i>	<i>Nab. J.P. or A.D.</i>	
<i>Reign.</i>	<i>(Varro) Ol.(Eus. Cen.)</i>			
	206 ⁴			
6.	797—799	Val. Asiaticus; M. Jun. Silanus	793 ⁶	4759—46
	206 ²			
	207 ¹			
7.	798—800	Claudius IV; L. Vitellius III	794 ⁷	4760—47
	206 ³			
	207 ²			
8.	799—801	Aulus Vitellius; L. Vipsanius Popl.	795 ⁸	4761—48
	206 ⁴			
	207 ³			
9.	800—802	Q. Veranius; A. Pompeius Gallus	796 ⁹	4762—49
	207 ¹			
	207 ⁴			
10.	801—803	C. Antist. Vetus; M. Suilius Nervil.	797 ¹⁰	4763—50
	207 ²			
	208 ¹			
11.	802—804	Claudius V; Ser. Corn. Orphitus	798 ¹¹	4764—51
	207 ³			
	208 ²			
12.	803—805	P. Corn. Sulla F.; L. Salvius Otho Titian.	799 ¹²	4765—52
	207 ⁴			
	208 ³			
13.	804—806	Dec. Jun. Silanus; Q. Hater. Anton.	800 ¹³	4766—53
	208 ¹			
	208 ⁴			
14.	805—807	M. Asin Marcellus; M'. Acil. Aviola	801 ¹⁴	4767—54
	208 ²			
	209 ¹			
1.	806—808	Nero I; Antistius Vetus	802 ¹	4768—55
	208 ³			
	209 ²			
2.	807—809	Saturnianus; Scipio	803 ³	4769—56
	208 ⁴			
	209 ³			
3.	808—810	Nero II; Calpurnius Piso	804 ²	4770—57
	209 ¹			
	209 ⁴			
4.	809—811	Nero III; Messala Corvinus	805 ⁴	4771—58
	209 ²			
	210 ¹			
5.	810—812	Apronianus; Fonteius Capito	806 ⁵	4772—59
	209 ³			

Beginning now with the consulate representing "the eighth year of the reign of Claudius Caesar" (prior to which it is irrelevant to look for any of the *dramatis personae*), we find that the annals of Aulus Vitellius and L. Vipsanius (in 48 A. D.) as well as the following of A. Pompeius and Quintus Veranius (in 49 A. D.), make no mention of Ummidius Quadratus as president of Syria or of Ventidius Cumanus as procurator of any part of Palestine. The governor of Syria, in those years, was Caius Cassius (Tac. *Ann.* B. XII. C. XI.), while Judea either had no procurator between king Agrippa's death and the country's annexation to the province of Syria in 49 A. D. (Tac. *Ann.* B. XII. C. XXII), or it witnessed the investiture of that office in the persons of Cuspius Fadus and Tiberius Alexander (Jos., *Ant.* B. XX, C. 5. §§1, 2.). Certain it is that none of the persons rendered notorious by the tragic Passover incidents recorded by Josephus put in their official appearance before the consulate of A. Pompeius and Q. Veranius in the *ninth* regnal year of Claudius (in 49 A. D.) Then, and thereafter, indeed, did appear that ill-starred configuration of official luminaries which proved so disastrous to the Jewish people. "In the consulship of Caius Antistius and Marcus Suillius [A. U. C. 803 (Varro), A. D. 50], the adoption of *Domitius* (under the name of NERO) was hurried on by the credit and influence of *Pallas*" (Tac., *Ann.*, B. XII. C. XXV. LIII.). In this consulate, too, occurred the appointment of Ummidius Quadratus as commander over the whole province of Syria, and, also by the influence of Pallas, his brother Felix was introduced into the political life of the East. Also in this consulate fell, "as falls the plague on men," the maladministration of Ventidius Cumanus, who apparently acted as procurator of Judea and Samaria as well as of the district of Galilee. It is, therefore, in this consulate that we have to look for the origin of those baleful influences which brought about "the troubles and ruin of the Jews" (*Wars*, B. II. C. XII. §1), for in this confluence of evil spirits, at this coincidence of iniquitous lives, we have the historical setting required by the horoscope of Josephus. It all happened in the consular term of C. Antistius Vetus and M. Suillius Nervilianus, A. U. C. 803 (Varro) or 50 A. D.

Working backwards from the *twelfth* year of Claudius Caesar, which, in the consular annals, is represented by the consulship of Faustus Sylla and Salvius Otho (A. U. C. 805 [Varro] or A. D. 52), we leave the time when the astrologers and mathematicians, Jewish as well as Chaldean, were banished out of Italy (Tac., *Ann.*, B. XII. C. LII and *Acts* XVIII. 2); when Felix, the brother of Pallas, had been already appointed procurator of Judea by Claudius and been protected from punishment by Ummidius

Quadratus (Jos., *Ant. B.* XX. C. VI. §2. 3.; Tac., *Ann. B.* XII. C. LIV.); and when Cumanus, the procurator, had been already banished and his captives had been crucified by Quadratus (Jos., *Ant. XX.* VI. §2). We look back upon a series of criminal transactions which consumed (if we may judge from the general slowness of court procedures in those days, cf. Acts XXIV. 27) the whole of the preceding consulate and half of the next before it. We see that the tragical Paschal feast and the third visit of Paul to Jerusalem cannot be placed in the *eleventh* year of Claudius, the consulate of Claudius V and Corn. Orphitus, for in that term of office occurred those portents and prodigies of which the great earthquake of Philippi was only one of the phenomena (Tac., *Ann.*, XII. XLIII; Acts XVI. 26). It remains, therefore, for the consulate before it, the consulship of Antistius Vetus and Marcus Suillius (A. D. 50), or, in other words, the *tenth* year of the reign of Claudius, to reflect the intensely dramatic events of the times; for the mission of Paul and Barnabas to Jerusalem in behalf of the liberty of men from the law of Moses is mentioned in the Acts (XV.) before the account of the apostle's missionary journey through Asia Minor and Macedonia (Acts XVI). It will be noticed, too, that the psychic atmosphere of the year intervening between Paul's third visit to the City and the advent of Aquila and Priscilla at Corinth is one of subdued calm, as created by the compromise of the Church's envoys on the question before the Council. It is, therefore, only another sign of harmony with historical facts that the Passover of Cumanus and the First Convention of the Christian Church should be assigned to the *tenth* regnal year of Claudius Caesar, or the consulate of C. Antistius Vetus and M. Suillius Nervilianus, in A. U. C. 803 (Varro) or 50 A. D.

Recurring now, for the purpose of meeting all counter-arguments and exceptions, to the most direct and decisive argument in favor of the year 50 A. D. as the correct year for the Passover and Convention in question, we derive the proof positive of this fact from the figures adduced by the Epistle of St. Paul to the Galatians. There, in Gal. I. 18 and II. 1, the very independent apostle declares that he did not acknowledge subordination to them which were apostles before him by even so much as a conference or consultation with any of them. He was converted, as we have seen, in 33 A. D. "Then after THREE YEARS" says he, "I went up to Jerusalem to see Peter, and abode with him *fifteen days*." That first interview had taken place in the days of unleavened bread, in the 348th year of the Seleucidae or the thirty-sixth year of the Christian Era, from Saturday, the twenty-sixth of March, to Saturday, the ninth of April. "Then FOURTEEN YEARS after I went up again to Jerusalem with Barnabas,

and took Titus with me also." Now this going up to Jerusalem of Gal. II. 1 is the very same with that which is reported in Acts XV. 2, where it is authoritatively stated that the Christians at Antioch "determined that Paul and Barnabas, and certain other of them, should go up to Jerusalem unto the apostles and elders about this question." This was in the $(348+14=)$ 362nd year of the Seleucidae or the $(36+16=)$ fiftieth year of the Christian Era. The date established by proof from Holy Writ is therefore in full agreement with facts.

We know full well that there are divers interpretations of this passage. For instance, Anderdon, in his *Fasti Apostolici* (p. 59 note 8), has the following comment: "This present visit, on occasion of the Council, is referred to by S. Paul (Gal. II. 1), as being after an interval of *fourteen years* from his first visit (Acts IX. 26), which he had mentioned seven verses before; or, as others say, from his conversion. The years are to be reckoned inclusively, by the Jewish method, and may thus be really *thirteen*, or even *TWELVE*." Accordingly, if this interpretation were correct, we could take an option on any one of these alternatives:

Both extremes included.	One term included.	None included.
36 A. D.	36 A. D.	36 A. D.
+12 yrs.	+13 yrs.	+14 yrs.
<hr/>	<hr/>	<hr/>
48 A. D.	49 A. D.	50 A. D.

But what genuine Jew would accept such a "Jewish method" when converted into a financial standard and applied literally to money matters? Or what Aryan or Gentile speculator would countenance a system of finance by which a given sum might be interpreted to stand for any desirable amount? As it is, the Hebrew mode of reckoning might make "*fourteen years*" equivalent with the "*fourteenth year*," or the "*fourteenth year*," however small the fraction, equivalent with "*fourteen years*," but not reduce "fourteen" to thirteen, or the fourteenth to thirteenth. The "*fourteen years*" of Gal. II. 1 may represent only an infinitesimal fraction of the "fourteenth" Jewish or Seleucic year 362, but it landed the date of the Passover of Cumanus and the First Apostolic Council in J. P. 4763 or 50 A. D. Hence we stand not only ready to reject such a fiction of interpretation as an expository fraud, but prepared to prove that the third visit of the great apostle to the Holy City took place in the summer or autumn of that same year in which the obscene affront at the Passover and the profane outrage at Pentecost enflamed the fanaticism of the Jews, especially "certain of the sect of the Pharisees," to explosive proportions—an event by which the governmental machinery of the new religious organization known

as the Christian Church was, for the first time, brought into active operation and control.

Now the most positive proof of the correctness of this choice of a year-date for the events mentioned is this, that it should show and exhibit certain calendric features which only one year in a cycle of nineteen years can have; that is to say, that a certain day of a certain month should coincide with a certain day of the week as well as correspond with the correct serial day of the solar cycle. Have we such data to define and delineate the time-determination in this case?

If we may hazard a conjecture, we venture to suggest that the day on which the outrage to public opinion was offered by the Roman soldier was not only "*the fourth day of the feast*," i.e. the eighteenth day of Xanthicus or Nisan, but *the seventh day of the current week*, in other words, the regular Sabbath or rest-day of the week. This extra day of leisure would naturally bring out a much larger crowd than an ordinary week day would. So, while it was customary for "great multitudes" of worshippers to be "gathered together from all parts to that feast," viz. to every one of the seven days of that feast, yet the great numbers of the injured and "pressed to death" (ten to twenty thousand) suggest that it was an unusually well attended convocation day that thus furnished an unusually heavy list of casualties. Such was the regular Sabbath-day. To the Sabbath was ascribed a superior importance and a prominence not attained by any other day of the week. It appears, for instance, from the same author's history of the Jewish Wars that, in the majority of cases, where an event is specifically dated, it is a Sabbath that is so precisely specified. This general predominance of the Sabbatic day in the chronology of Israel would in itself suggest the giving of first place to the Sabbath-day in any conjecture such as the present. But there is more to the selection than a mere conjecture in this case.

It has been said that, on this disastrous day, a rabiate officiating rabbi had pronounced the liturgical curses upon the enemies of Israel as prescribed, but in a more realistic manner than required by the ritual. If this be so, we have discovered in this day the moving cause or provocation for the obscene insult offered the Jews by the Roman soldier. Deut. 30:7. The scripture lesson containing these ethnical denunciations was, of course, not supposed to be read in the celebration of a great feast, like the Pass-over, or Tabernacles, or Dedication, but was reserved for reading on one of the regular Sabbath-days of the year, like one of the pericopes of a Christian Church liturgy. The Sabbath, in this case, being the regular seventh day (or Saturday) that fell within the week of festivity known as the Feast of Unleavened Bread, coinciding with the "fourth day of the feast," gave distinct and

definite Sabbatarian character to this date, the $[14+4=]$ 18th day of Xanthicus or Nisan, making it as clear and unequivocal a chronological datum as any to be found in Josephus. In order, then, to ascertain the true year-date of the Passover of Cumanes and the First Apostolic Council it is only necessary to find out what year in the vicinity of St. Paul's fourteenth year after his conversion contained a "fourth day of the Feast," i.e. an eighteenth day of Nisan or Xanthicus which was at once coincident and identical with a Sabbath day.

We have as good as agreed to the conclusion that the date we are seeking is the fiftieth year of the common Christian Era, or J. P. 4763. Does this Julian twelvemonth, which harmonizes in the main with the Seleucic year 362, lend itself readily to the interpretation we have placed upon its Syro-Macedonian counterpart? In other words, does the Jewish or Syro-Macedonian calendar, as reconstructed by us, correspond without forcing methods to the features which characterize the Julian year 4763 or 50 A. D.?

In order to do justice to all the conjectures and well-meant conclusions by supposedly well-qualified chronologists, let us take in a couple of years in both directions into this reconsideration of facts and figures: we shall then see, not only which of all these years is the year of happening, but also why the others cannot possibly be made to take the place of the only authentic date. Counting the number of days from the beginning of the Jewish-Roman or Asmonean-Herodian Era, Apelleus [Casleu] twenty-fifth, Sel. 148, or December twenty-second, 165 B. C. (excl.), we shall have, up to and including Sel. 362 [Cal. P. V.] or 50 A. D., the following sum:

	<i>Cal. Per.</i>	<i>Sel.</i>	<i>B.C. & A.D.</i>	<i>Days.</i>	
III.	1.	148-153	or 165-160	1923	} = 22743
	2.	154-172	159-141	6940	
	3.	173-191	140-122	6940	
	4.	192-210	121-103	6940	
IV.	1.	211-229	102-84	6940	} = 27760
	2.	230-248	83-65	6940	
	3.	249-267	64-46	6940	
	4.	268-286	45-27	6940	
V.	1.	287-305	26-8	6940	} = 27759 !
	2.	306-324	7-12	6939	
	3.	325-343	13-31	6940	
	4.	344-362	32-50	6940	
				78262	= 78262

This summation of days will check up the number at the end of the year Sel. 362 or the close of the fourth nineteen-year cycle of the Vth Calippic Period, when all minor calculations before and after must admit of the same result without effort or force.

If, on the other hand, we recount the days from the end of the Asmonean-Herodian Era, i.e. from the ninth of Lous [or Ab] or the sixth of August, 70 A. D., by adding together the last year's 128 d. (in Sel. 382), the 6940 days of the first nineteen-year cycle of the VIth Calippic Period (from Sel. 363 to 381 or 51 to 69 A. D.) and the three last years of the preceding cycle and period (so as to include the conjectures of Lewin (48 A. D.), Petavius (49 A. D.), DeWette, and Smith (50 or 51 A. D.), we shall soon obtain the correlations which, in each consecutive year, will yield the date of the "*fourth day*" of the Passover week by the simple addition of eighteen days to each correlary for the eighteenth day of Xanthicus or Nisan. Thus:—

<i>Cal. Per.</i>	<i>Sel.</i>	<i>A. D.</i>	<i>Days</i>
V. ⁴ 17.	360	or 48	354 d.
V. ⁴ 18.	361	or 49	354 d.
V. ⁴ 19.	362	or 50	384 d.
VI. ¹ 1-19	363-81	or 51-69	6940 d.
VI. ² 1.	382	or 70	128 d.
			<hr/> 8160 d.

Or, computing the same period by the longer process of multiplication and addition, we reach the equation at the close of Sel. 359, in the spring of 48 A. D., in the following manner:

<i>Jewish Count.</i>	<i>Julian Count.</i>
381 Sel.	69 A. D.
-359 Sel.	-47 A. D.
<hr/> 354×22	<hr/> 365×22
708	730
708	730
<hr/> 7788	<hr/> 8030
240 d. in 8 emb. mos.	+ 5 leap year days
4 d. ex. intercal.	
<hr/> 8032	<hr/> 8035
+ 128 d. in Sel. 382	218 d. in 70 A. D.
<hr/> 8160 d.	<hr/> 8253 d.

Deducting these 8160 days from the sum total of 85330 days aggregated in the Asmonean-Herodian Era for the number of days on the Jewish side of the correlation, and from the sum of 8253 for the number on the Julian side, we get the equation as follows:

		<i>Jewish.</i>	<i>Julian.</i>		
		85330 d.	8253 d.		
		— 8160	— 8160 d.		
77170		77170	93 d. in 48 A. D.	48A	93
18	17.) Sel. 360 =	354	354 d. in Sel. 360		+18
	360				
7)77188			447		111 =
			— 365 d. in 48 A. D.	Fri., Apr. 21	
11026+6					
77524		77524	82		82
18	18.) Sel. 361 =	354	+354 d. in Sel. 361.		+18
	361			49G	
7)77542			436		100 =
			— 365 d. in 49 A. D.	Tues., Apr. 10	
11077+3					
77878		77878	71		71
18		177	177		18
	19.) Sel. 362 =	30	30	d. in Sel. 362.	
7)77896	362	177	177		89 =
				50F Sat., Mar. 30	
11128+0			455		
			— 365 d. in 50 A. D.		
78262		78262	90		90
18		30	30		18
	1. Sel. 363 =	1	1	d. in Sel. 363.	
7)78280	363	324	324		108 =
				51ED Fri., Apr. 17	
11182+6			445		
			— 366 d. in 51 A. D.		
78617		78617	79 d. in 52 A. D.		79
18					18
7)78635	364				97 =
				52C Wed., Apr. 7	
11233+4					

Thus these small examples in simple arithmetic go a far way toward answering our question, Does the calendar, Jewish and Julian, comport with the postulates of history and tradition, or does it fail to come up to the specifications? They declare in unmistakable simplicity of language, not only that the Passover holidays of A. D. 50 did correspond, as required, with the account of the Jewish historian and the computation of the Christian apostle, but also, categorically, that the twelfth, thirteenth, fifteenth, and sixteenth years of Paul's count from his conversion did not so comply with demand. That is to say, the "fourth day" of the Passover, in 48 A. D., fell on a Friday, in 49 A. D. on a Tuesday, in 51 A. D. on a Friday, and in 52 A. D. on a Wednesday; but never on a Sabbath or Saturday, as it did in the Julian year 50 A. D. or the Seleucic year 362. Therefore none of the years from 48 to 52 A. D could, by any possibility have been the

date of the Passover of Cumanes or the first convention of the apostles, save only and alone the year pointed out by the declaration of the apostle, "Then *fourteen years after* [36 A. D. + 14 = 50 A. D.] I went up again to Jerusalem with Barnabas, and took Titus with me also."

We could not, therefore, desire a more splendid proof of the correctness of our calendar as borne out by the ease and facility with which it falls in line with historical facts. One and all of the test-cases so far adduced in demonstration of the life-like verisimilitude of our calendar to the one actually used by the Lord and His apostles have served the purpose of reflecting every form and feature of their original, until the copy, laboriously but lovingly reconstructed, is changed into the same image from glory to glory, even as by the spirit of God's holy truth.

VOLUME V. CHAPTER IV

PAUL'S THREE SABBATH-DAYS AT THESSALONICA

Believing that every point of contact between the Acts of the Apostles and the annals of the outside world is of great service to the cause and so much to be desired, we venture to suggest as another test-case for probing what claims to be a reproduction of the calendar of Paul's day, a date for which the *prima facie* evidence is perhaps a little precarious and scant, but for which an argument may be evolved which will be granted *ex post factum* to be cumulative and self-confirmatory to a climactic degree. We refer to the "three Sabbath-days" of St. Paul in Thessalonica of Acts XVII. 1-3: "Now when they [Paul and Silas] had passed through Amphipolis and Apollonia, they came to *Thessalonica*, where was a synagogue of the Jews: and Paul, as his manner was, went in unto them, and THREE SABBATH DAYS reasoned with them out of the Scriptures, opening and alleging, that Christ must needs have suffered, and risen again from the dead; and that this Jesus, whom I preach unto you, is Christ." We believe that, like the "fifteen days" of Gal. 1:18, these "three sabbath days" were anniversary in character, commemorating as only three sabbath-days can the trinity of Sabbath-days incorporated in none but the Paschal season. As the Passover season, or days of unleavened bread, were seven in number, and were preceded by a week of preliminary preparation styled "purification," the whole period of Paschal activity and festivity was really bound up in "three sabbath days," as indicated in conventional parlance. As we envisage them, the third and last of these three "seventh" days signalized the last convocation-day of the feast itself, the twenty-first day of Xanthicus or Nisan, the regulation sabbath and the commemoration-sabbath being in this case co-incident and absolutely conterminous and co-extensive. The second or central Sabbath, being the "fourteenth day of the same month" [Abib, Ex. XII. 6. 18] and properly the preparation day on which the Passover was dated to be killed, became automatically the first day of the feast, throwing off the character of preparation-day on to the day preceding it and creating the necessity of beginning the seven-days' purification a day earlier than usual, viz. on the last day of the week before the feast, which thereby became the first of the "three sabbath days" of the Paschal season. This felicitous circumstance renders the expression "three sabbath days" of Acts XVII. 2 a chronological description of ex-

ceptional value. It is not often that this calendric situation occurs, and being of such rare occurrence, should for that very reason be of more than ancillary service in fixing the date of this Passover.

Now, the Passover of Paul's "three sabbath days" at Thessalonica must have fallen between two well-known events of the times; the great earthquake of Philippi (Acts XVI. 26), and the expulsion of the Jews from Rome (Acts XVIII. 2). If the earthquake at Philippi was reported among the portents and prodigies of the preceding year, this year was the consular term of Claudius Caesar V and Servius Cornelius Orphitus, and therefore the time-determinant of Paul's Passover at Thessalonica on the farther side (cf. Tacitus' *Annals* B. XII. C. XLIII. XLI). And if the wholesale banishment of astrologers and mathematicians out of Italy included or implied the expulsion of Jews as well as other Orientals (comp. Tacitus' *Annals* B. XII. C. LII), we have the consulship of Faustus Sylla and Salvius Otho acting as a time-determinant on the nearer side. Between the two we ought to descry a definite point of time for the two weeks' period of the Passover season. With the aid of the list of consuls and a reliable catalogue of eclipses, we ought to find it easy, too, to spike the events of these two consulates in their proper places, were it not for the fact that, with a magnificent display of scientific learning, the three leading chronological schools assign each of these three consulates to three different years in the standard scale of time. For this reason it is necessary that we should go deeply and thoroughly into the arrangement and emplacement of the consular annals of that age.

The list of consuls, as it has been handed down to us, for the reign of Claudius from his sixth year to his fourteenth, is as follows:

<i>A. U. C. (Varro)</i>	<i>Trib. Yrs.</i>	<i>Consuls.</i>	<i>Nab.</i>	<i>J. P. or A. D.</i>
797—799	6	Val. Asiaticus II. and M. Jun. Silanus	793 ⁶	4759 46
798—800	7	Claudius IV; Lucius Vitellius III.	794 ⁷	4760 47
799—801	8	Aulus Vitellius; L. Vipsanius Poplicola	795 ⁸	4761 48
800—802	9	Q. Veranius; A. Pompeius Gallus	796 ⁹	4762 49
801—803	10	C. Antistius Vitus; M. Suillius Nervil.	797 ¹⁰	4763 50
802—804	11	Claudius V; S. Cornelius Orphitus	798 ¹¹	4764 51
803—805	12	P. Cornelius Sylla Faustus; L. Salvius Otho Tit.	799 ¹²	4765 52
804—806	13	Dec. Jun. Silanus; Q. Haterius Antoninus	800 ¹³	4766 53
805—807	14	M. Asinius Marcellus; M. Acilius Aviola	801 ¹⁴	4767 54

The consulate of Valerius Asiaticus II and M. Silanus ending on the thirty-first of December, 46 A. D., and the consulship of Claudius IV and Lucius Vitellius III beginning on the day before the first of January, 47 A. D. (ergo on the thirty-first of December,

46 A. D.), both are firmly fixed and held in place by the same historical eclipse of the moon which, happening on the same thirty-first of December, 46 A. D., remains forever unchanged and unchangable as the sure and decisive determinant of time in the midst of chaos. The remaining consulates, following in documentary and mathematical order, adjudicate the terms of Claudius V and S. Cornelius Orphitus to J. P. 4764 or 51 A. D., and that of P. Cornelius Sylla Faustus and L. Salvius Otho to J. P. 4765 or 52 A. D.

Now, if it were not for the disturbing influence of the diverging chronological schools we repeat, we might consider the consulates before and after the Thessalonian Passover of the great apostle as sufficiently well settled to establish with them and through them the date of this remarkable Passover. But, as is well-known by this time, the school of Dr. Jarvis, Page and Totten persist in ascribing the consulate of Claudius V and S. Cornelius Orphitus to J. P. 4763 or 50 A. D., and the consulship of P. Corn. Sylla Faustus and L. Salvius Otho to J. P. 4764 or 51 A. D., while the opposing school of Dr. Seyffarth et al. as persistently assign the consulate of Claudius V and Orphitus to J. P. 4765 or 52 A. D., and the consulship of Corn. Sylla Faustus and L. Salvius Otho to J. P. 4766 or 53 A. D. All three of these chronological schools cannot be right: two of them must be wrong. It therefore devolves upon us by other additional arguments, to determine to which of these four years the two consulships in question properly belong. To this end we shall produce arguments from the age of two of the Roman emperors; from the list of acclamations of the emperor Claudius in connection with his line of years as tribune of the people; and, finally, from the calendric conditions of the years 50 to 53 A. D., as they appear in the calendars for the corresponding Seleucic years 362 to 365.

One way of fixing these consular terms with the greatest certainty is by the application of the age of two of the Roman emperors to the *Astronomical Canon* of Ptolemy and for applying the result to the list of consuls. For this purpose we select the age of two (two of a kind), the one being that of Domitius, better known as *Nero*, and the other that of Domitianus, the son of Vespasian: Both emperors of a later day enter the same year of the world's history with their malign immanence, the former by his introduction into the political life of Rome, the latter by his natal initiation into this world as a unit to be reckoned with some thirty years later. To take the nativity case first, Domitian was twenty-nine years and eleven months old when he usurped imperial power by poisoning his brother Titus, and 40 y. 10 m. 26 d. old when he was himself put to death on the eighteenth of September, 96 A. D. He was therefore slain on the fiftieth day

after he had finished the fifteenth year allotted to him on the Astronomical canon, Nab. 843, which Egyptian year, being held rigidly in place by the regnal years of Nerva and Trajan [Nab. 844 and 845-863], as well as by the astronomical observation in his own twelfth year [Nab. 840], cannot be anything else than 95-96 A. D. Deducting, then forty-five years or 44 y. 10 m. 26 d. from 843 N. E. or 95-96 A. D., we have Nab. 798 or 50-51 A. D. as the year completed before Domitian was born, or the beginning of Nab. 799 as the actual year in which the future emperor was born on the twenty-fourth of October, J. P. 4764 or 51 A. D. This being the time when his father, T. Flavius Vespasianus was designated consul, to serve in that capacity during the last two months of the consulship of Claudius V. and S. Cornelius Orphitus, this unimpeachable result clinches this consulate itself to 51 A. D. and clamps the consulship of P. Cornelius Sylla Faustus and L. Salvius Otho to 52 A. D. Together with this allocation of these consulates, of course, go all the events connected with their terms, the earthquake of Philippi, etcetera, etcetera.

In a similar manner, these two consulships are permanently attached to the years 51 and 52 A. D. by the age of Domitian, the other monster of wickedness, later to become infamous as the emperor Nero. He was in the fifteenth year of his age, in the FIFTH *consulship of Claudius* and the first of his colleague Servius Cornelius Orphitus, when "the senate, in a fit of adulation, resolved that the young prince should be declared capable of the consulship at the age of twenty, and be considered in the meantime, as consul elect, with proconsular authority out of the city, and the additional title of prince of the Roman youth." (Tac. *Ann.* XII. XLI). He had then, in J. P. 4764 or 51 A. D., as already stated, only reached the age of fifteen when, according to the precedent established by Augustus in the cases of his grandsons Caius and Lucius, Nero was given the manly gown "before his time," as the historian has it, "that, though still under age, he might appear qualified to take upon him a share in public business." Having been born, as all authorities agree, in the consulship of Acerronius Proculus and Pontius Nigrinus, or the same twelvemonth in which Tiberius was smothered to death, either *nine months* after the death of the tyrant on December fifteenth (XVIII. Kal.) Jan., as the document of the historian Suetonius has it, or on the thirteenth of April (XVIII. Kal. Maiæ), as the monument of Dendera in Egypt gives the planetary configuration relating to Nero's birth, nineteen days according to Suetonius and Tacitus, or twenty-nine days according to Dion Cassius, after the assassination of Tiberius, Nero was in his fifteenth year, early or late respectively), when he was thus shamelessly favored in preference to Britannicus for the exercise

of boundless influence and power. Taking the statements of Eutropius as well as Suetonius to be correct (see Jarvis' *Chron. Intr.*, p. 311 and 312ⁿ), that Nero committed suicide in the thirty-second year of his age, we incline decidedly in favor of the earlier astronomical determination of his birthday, to the effect that, at the time of his investiture with the garb of manhood, he was nearly fifteen years of age. He was born at the close of A. U. C. 789 (according to Varro), and was therefore fifteen at the end of A. U. C. 804. Hence, before the year of the City 804 (according to Varro) had run out (—provided it ran out at the Parilia), the consulship of P. Cornelius Sylla Faustus and L. Salvius Otho Titianus had begun on the first of January, 52 A. D. Consequently the earlier consulate of Claudius V. and Orphitus is fixed by the fifteenth year of Nero to J. P. 4764 or 51 A. D., the later consulship of Sylla Faustus and Salvius Otho to J. P. 4765 or 52 A. D., and so are also the events recorded in the annals of these men, the earthquake in the former, the expulsion of the Jews in the latter year, etcetera.

Beside these subsidiary arguments from the age of the two most despotic or "domineering" Roman emperors, we have a direct testimony to the eleventh and twelfth tribunitian years of Claudius in the rapid succession of acclamations addressed to the emperor in his eleventh and twelfth regnal years, 51 and 52 A. D. In a series of inscriptions published by Nikutsky and Deissman and utilized by Dr. Robertson in his *Luke the Historian*, pp. 175–176, a direct reference is made to Gallio, the deputy or proconsul of Achaia, (to whose judgment-seat the Jews at Corinth brought Paul and made insurrection against him), with the date "the twenty-sixth acclamation of the Emperor Claudius." The appearance of this Roman official on the scene, (who makes the impression of one already wearied by previous experience with the endless "questions of words and names, and of the law" of the Jews), is dated, in the Acts 18:11, "a year and six months" subsequent to the three week-ends' sojourn at Thessalonica and the extremely transient stay at Athens, which was practically nil. In the Delphian inscriptions his appearance is first noted in connection with the twenty-sixth acclamation of Claudius subsequent to the twenty-second, twenty-third and twenty-fourth acclamations, which all occurred in his eleventh tribunitian year (in 51 A. D.) "But we strike terra firma," says Dr. Robertson, "in the Delphi inscription. . . All things considered, the Delphi inscription gives us the one certain date in Paul's ministry and in the Book of Acts. All other dates must now be made to conform to the new light here turned upon the chronology of the Acts and of Paul's Epistles." Now, when did the "twenty-sixth acclamation of the Emperor Claudius" take place?

We know from official documents of the emperor, that the years as tribune of the people corresponded with the regnal years of the empire. While, in the reign of Augustus, the tribunitian years began on the twenty-seventh of June (V. Kal. Jul.) and ran, broadly speaking, from July to July (see Jarvis' *Chron. Intr.*, pp. 222ⁿ and 223), under the regime of Claudius they ran co-extensively with the years of his reign, as they almost coincided with the years of the Julian Period and the years of the common Christian Era. Thus, for instance, the *fifth* tribunitian of Claudius had just about halfway ended, and the second half was just about to begin when, granting the Jews their request regarding the holy vestments, he sent them the following letter: "Claudius Caesar Germanicus, *tribune* of the people the *fifth* time, and *designated consul* the *fourth* time, and *imperator* [semi-annually] the *tenth* time...dated *before the fourth of the Calends of July*, when *Rufus and Pompeius Sylvanus are consuls*" (Jos. *Antiq.* B. XX. C. I. §2). Written on the second day of the antiquated tribunitian term under Augustus, but on the third day preceding the first of July, the usual date of proconsular initiation under Claudius, the letter cannot be located in any other than the summer of J. P. 4758 or 45 A. D. This being so, if we move forward some six years to the eleventh tribunitian year of Claudius, we find that this eleventh year of tribuneship can be nothing else than the 4764th year of the Julian Period or the fifty-first year of the common Christian Era.

Now we know, says Dr. Robertson, "that 'the twenty-second, twenty-third, and twenty-fourth acclamations all came in the eleventh tribunitian year' of Claudius (Lake), which was Jan. 25, A. D. 51, to Jan. 24, A. D. 52. The date of the twenty-fifth acclamation has not been found, [but the date of the twenty-seventh acclamation of Claudius is known by an inscription to be August first A. D. 52], so that the end of 51 is the earliest probable date for the *twenty-sixth acclamation* [at and before which Gallio appears as proconsul of Achaia]. So, then, the Delphi inscription with the twenty-sixth acclamation, while Gallio was proconsul, falls between the end of A. D. 51 and August 1, A. D. 52." The time of Paul's indictment and prosecution by the Jews might, therefore, be any time subsequent to the usual initiation into office on July first, 52 A. D., or in the following year J. P. 4766 or 53 A. D., for "A YEAR AND SIX MONTHS" after the Thessalonian Passover in the spring of 52 A. D. would carry us forward to the fall of 53 A. D., and his tarrying there "*yet a good while*" (Acts 18:18) to the end of autumn or the beginning of winter. If, then, Gallio had been deputy or proconsul already at the time of the twenty-sixth acclamation, that is to say, in the early months of A. D. 52, his incumbency in office fixes the date of the banishment of the Jews (Acts 18:2) to

this same year A. D. 52, the shock of the Philippean earthquake (Acts 16:26) to 51 A. D., and the persistent stay of "three sabbath days" (Acts 17:1-3) in the interval of spring, J. P. 4765 or 52 A. D.

Now, if we were only concerned about stabilizing the year-date of a certain event in Paul's life and ministry, we should conclude that we had abundantly settled that question, and that we had established that date beyond further cavil. But since it is not merely a matter of drawing an outline for the delineation of a man's biography, but a matter of filling in this framework with the calendric elements which go to make up an almanac or ephemeris, and in this case, claims to be the very same scheme as that of the calendar then in vogue, it is incumbent on us to compare the condition of the year pointed out as the date of Paul's Thessalsonian Passover with the phases of the calendar as exhibited by the scheme purporting to represent the almanac of that year. How, then, do the calendric conditions of 52 A. D., according to the commonly accepted chronology, or 51 A. D. according to the anachronistic school, or of 53 A. D. according to the metachronistic following, comport with the requirements and postulates of the narrative in Acts?

Taking the result of the calculations of the preceding test-case as a basis for the present computation, we have the sum of 77878 as the total number of days accumulated at the close of Sel. 361, one lunar year with intercalary month, one entire cycle of nineteen lunar years, and the fraction (128 days in Sel. 382) of the last year of Jewish national history before the Asmonean-Herodian Era came to a close. The addition of two lunar years, one embolismic month and one extra-intercalary day will bring us to the point where the Passover of 52 A. D. may be computed.

		<i>Jewish Julian</i>			
77878		77878	..	71 d. in 50 A. D.	71
15		177	177		15
7)77893		30	30	d. in Sel. 362.	—
		177	177		86 =
11127 + 4			455		50F Wed., Mar. 27
			—365 d. in 50 A. D.		
78262	78262	78262	..	90	90
15	21	30	30	15	21
7)78277	7)78283	1	1	d. in Sel. 363	—
		324	324	51ED 105 =	111 =
11182 + 3	11183 + 2		—366 d. in 51 A. D.	Tues., Apr. 14;	Mon., Apr. 20
78617	78617	78617	..	79	79
15	21	30	30	15	21
7)78632	7)78638	1	1	d. in Sel. 364	—
		324	434	52C 49 =	100 =
				Sun.,	Sat.,

		<i>Jewish</i>	<i>Julian</i>			
				-365 d. in 52 A. D.	Apr. 4;	Apr. 1
<u>11233+1</u>	<u>11234+0</u>			<u>69</u>	69	69
					15	21
78972	78972	78972 ..		53B	84 =	90 =
15	21					
<u>7)78987</u>	<u>7)78993</u>					
11283+6	11284+5				Fri.,	Thurs.
					Mar. 25;	Mar. 3

The significance of this test, comparatively trivial as it may appear, will stand out conspicuously enough by virtue of what we most ardently want to bring out—the simplicity, the naturalness, the self-evidence with which this calendar of ours adapts itself to the actual requirements of the case. Nothing, it seems to us, could square with such ease and grace with the conditions and contingencies of the time of happening, unless it be a rediscovered original copy of the quondam calendar-cycle engraved on slab of marble or embossed in bronze, just as it was consulted, alluded or appealed to in the meridian of its actual vogue and daily use. Indeed, we go not far astray if we suggest that, in the cycle of calendars before us, we have a set of almanacs as perfect and complete as if they had been copied and transcribed from the ones then actually in use.

If, then, we have only brought away with us the impression that we have glimpsed a stroke of real life and actuality in the far distant past, even as we observe a streak of lightning coming out of the east, and shining unto the west, we shall be content and thankful for that modicum of revelation. To make up, as it were, for the scantiness and shortcoming of historical detail in the account of Paul's "three sabbath days" at Thessalonica, his labors of "one year and six months" at Corinth, and, after his tarrying there "yet a good while," his fourth journey and visit to Jerusalem, probably in 54 A. D. (Acts 18:22), we shall now, in the fulsome record of the fifth and final visit, be treated, by way of compensation, to the maximum of chronological information and enlightenment. The munificence of fact and circumstance is so rich and replete that we seem to see a continuous moving picture thrown upon the screen full of life and pathos. That will make amends for the bare flash of the former.

VOLUME V. CHAPTER V

PAUL'S FIFTH AND LAST VISIT TO JERUSALEM AND VOYAGE TO ROME

Before availing ourselves of this final as well as finest of all test-cases of biblical history, we consider it well to pursue the same policy in approaching our task which we have employed before this, namely that of fortifying our chronological position before embarking on the test of the date under probation. That such a re-entrenchment in the groundwork of chronology is really necessary can hardly be called in question among those who have taken the slightest cognizance of the conflicting views on the subject, seeing that dates advanced for the fifth visit of Paul to Jerusalem are as widely distant from the mark as they are distinct from one another. Thus, there has been suggested 55 A. D. by Petavius, 56 A. D. by Basnage, 58 A. D. by Lewin, Dimbleby, Totten, et. al., 58 or 59 A. D. by Eichhorn and Ussher (*King James' Version*), etcetera, etcetera. It is equally obvious that where such a diversity of views exists in the ranks of reputed authorities, an appeal to prestige and reputation can be of no avail. How, then, can we arrive at certainty and conviction? Only by consulting the cosmic chronometers themselves, the sun and the moon and the stars in their courses, as they mete out their measures of time and mark certain intervals by eclipses and obscurations produced by the meeting and passing of their luminous bodies. Such celestial markers of time are registered in Ptolemy's *Astronomical Canon* and *Catalogue of Solar and Lunar Eclipses*. Both may be consulted for insurance of safety. In the beginning of Nero's reign, as we have already seen in the preceding chapter, we have such an epoch-marking occurrence in the heavens indissolubly linked with certain occurrences and certain means of time-determinations on earth. There was the eclipse of the sun recorded by Tacitus (*Annals* B. XIV. C. XII.) and corroborated by Pliny (*N. H.* B. II. s. 70), on the thirtieth of April, in the consulate of C. Vipstanius Apronianus and L. Fonteius Capito.

Now it would seem that, when we are told in what consulship or year from the building of Rome such a phenomenon of the skies occurred, we should know at once in what year of the world or of any given era the event occurred. But such is unfortunately not the case. Roman writers of history and natural science have

indeed indebted us to their memory by explicit accounts of this solar eclipse. Tacitus not only records the fact in his *Annals* that "the sun suffered an eclipse" in the consulship of Caius Vipstanus and Lucius Fonteius (A. U. C. 812, according to Varro), but Pliny, in his *Nat. Hist.* (B. II. S. 70), confirming the fact and defining the time more explicitly, reports the occurrence as follows: "The eclipse of the sun which occurred the day before the Kalends of May, in the consulship of Vipstanus and Fonteius, not many years ago, was seen in Campania between the seventh and eighth hour of the day; the general Corbulo informs us, that it was seen in Armenia, between the eleventh and twelfth hour."

This apparently scientific fixing of the date ought to appear simple and yet decisive enough to satisfy any reasonable inquirer after the truth of history, and it no doubt would be so, if it were not for the fact that certain exponents of chronology, "pestilent, and movers of sedition" in that science, had not transferred this astronomical fact, the one to the consular term of Nero IV and Cossus Lentulus, the other to that of Nero III and Messala Corvinus, according as they moved the consulate of Vipstanus and Fonteius a year higher up or a year lower down.

With a blaze of oratory and a show of prodigious learning, the sophisticated protagonists of the anachronistic school, Dr. Jarvis, Mr. Page, Prof. Totten, and a host of followers, assign the consulate of Vipstanus and Fonteius to A. U. C. 811 (Varro) or 58 A. D., leaving the eclipse behind to occur in the consulship of Nero IV. and Cossus Lentulus. The metachronistic school, on the other hand, with a no less sensational display of pyrotechnics, represented by Dr. Seyffarth and others, consign the consulship of Vipstanus and Fonteius to the following year A. U. C. 813 (Varro) or 60 A. D., coolly imposing on Tacitus the blame for the blunder of missing the eclipse in the annals of the proper year and mixing up an account of it with material pertaining to the twelve-month post eventum. But the consignment of this consulate to these various years does not carry the eclipse of the sun itself with it. On the contrary, the obscuration of the sun, as it occurred, remains eternally lodged on the thirtieth of April, J. P. 4772 or 59 A. D., and so it is infallibly located by the majority of noted chronologists.

That this majority verdict is correct and really historical may be perceived without the pain of deep study by a comparison of these years with three years of modern times, say, 1907, 1908, and 1909, in which lunations certainly corresponded, or with the three following years 1910, 1911, or 1912, in which (but for a difference of two days) the eclipses themselves corresponded with those of A. D. 58, 59 and 60. Now, seeing that solar obscurations can occur only with a neomenia or renewal of the moon, a correla-

tion of the solar eclipse dates of 58, 59 and 60 A. D. with the phases of the new moons in 1907, 1908 and 1909 (during the first half of each year) will automatically reveal the eclipse and the lunation which history says concurred in the consulate of C. Vipstanus Apronianus and L. Fonteius Capito.

<i>Eclipses</i>			vs.	<i>Lunations.</i>		
58	59	60	..	1907	1908	1909
				Jan. 13	Jan. 3	Jan. 21
				Feb. 2	Feb. 2	Feb. 20
				Mar. 14	Mar. 2	Mar. 21
		Apr. 19		Apr. 12	Apr. 1	Apr. 19
	Apr. 30				Apr. 30	
May 11				May 12	May 29	May 19
				June 10	June 28	June 17

As this prospectus shows, no eclipse answers the description of the historian save that of the day before Mayday, and that one eligible eclipse, says the historian, occurred in the consulate of Vipstanus and Fonteius.

According to the same historian, and according to all consular lists extant (see, for instance, those of Cassiodorus, Victorius, Idatius, the *Chronicon Paschale*, etc., in Clinton's *Epitome*, Jarvis' *Chron. Introduction*, or Smith's Dictionary), four consulates had, in Nero's reign, preceded this term of Vipstanus and Fonteius. They were the following:

A. U. C. (Varro) Sel.			Consuls.	Nab.	J. P. or A. D.
805—807	366		M. Asin. Marcellus; M. Acil. Aviola	801 ¹⁴	4767 54
806—808	367		Nero Imp. I; Antistius Vetus	802 ¹	4768 55
807—809	368		Q. Volus. Saturninus; Pub. Corn. Scipio	803 ²	4769 56
808—810	369		Nero Imp. II; L. Calpurn. Piso	804 ³	4770 57
809—811	370		Nero Imp. III; Val. Messala Corvinus	805 ⁴	4771 58
810—812	371		C. Vipstanus Apron.; L. Fonteius Capito	806 ⁵	4772 59
811—813	372		Nero Imp. IV.; Cor. Cossus Lentulus	807 ⁶	4773 60

In spite of this consensus of authorities, the possibility might still exist of the omission or super-addition of a consulate in this series. It may, therefore, be deemed advisable to furnish the proof that the consulship of Vipstanus and Fonteius was indeed the *fifth* team of consuls in the reign of Nero, and not the fourth or the sixth when fixed to the year A. U. C. 812 or 59 A. D. In the second sentence of his introduction to the consulship of Caius Vipstanus and L. Fonteius, the Roman annalist affirms expressly: "He [i.e. Nero] had gained *in four years* [55, 56, 57, and 58 A. D.] a taste of power, and was now grown sanguine enough to think that he might hazard a daring stride in guilt." The reason for this assumption of greater license in his bearing is twofold. In the first place, having attained the age of twenty-one in the consulate of Vipstanus and Fonteius (being "just out of his seven-

teenth year" when he began to reign [*Annals* B. XIII. S. VI]), he was of age to take a wife of his own choice and to put away the one to whom he had been "joined in marriage" when he had been sixteen in the year before the death of Claudius (A. U. C. 806 or 53 A. D.) The other reason why the consulship of Vipstanus and Fonteius must be accounted the *fifth* term of consular office during the reign of Nero is the regular, systematic accretion of incentive to crime known as the biblical "root of all evil," which, with the periodic return of the quinquennial census, accrued to the high strung young emperor with the fresh influx of revenue. It must be obvious to anyone who is able to draw a line with a straight-edge that, if the years of the Christian Era, 9, 14, 29, 34, 39, 44, 49, 54, and 64, were the periodical returns of the quinquennial census and luster, then the year 59 A. D. must also have been a terminal point of this famous taxation serial. We have seen that the spring preceding his accession to power experienced the last collection of taxes in the life of Claudius: consequently the first four years of Nero's reign, known as the years of his greatest popularity, were the first four years of a lustrum or taxation-period, characterized by their freedom from molestation and their general immunity from tax-collection. The *fifth* year, which was the crucial year both of the luster and of Nero's life, witnessed by a natural coincidence both the oppressions practised by the collectors of the revenue and the excesses perpetrated by the imperial master of the world. The same year, therefore, which brought on the marriage of Nero with Poppoea and the murder of his mother Agrippina, brought on also the distraction and disillusionment of the people, which resulted in criticism and condemnation of the emperor.

The conclusion of the argument must necessarily be, that the majority of chronologists have rightly affixed the *fifth* year of Nero's reign, known as the consulship of Vipstanus and Fonteius, to the year from the building of Rome 812 (according to Varro) or the year of the Christian Era 59 A. D. And, as the *Astronomical Canon* will as unmistakeably connote, a perfect block of four full Egyptian years is accorded to Nero before its *fifth* full year of sovereignty, Nab. 806, is attributed to him, beginning with Thoth first or Toot first (August thirtieth or August ninth in 58 A. D.) and ending with Epagomene sixth (August twenty-ninth) or Epag. fifth (August seventh) in 59 A. D. Since the regnal years of Nero almost synchronize with the Nabonassan years of Ptolemy's *Canon*, a misapplication of terms is absolutely out of the question. And being, moreover, almost coextensive with the secular variation of the Seleucid years, it is certain that the *fifth* year of Nero, also designated the consulship of Vipstanus and Fonteius, was coeval with the 371st year of the kingdom of

the Greeks and was accounted the ninth year of a nineteen-year lunar cycle (Cal. P. VI.. This much being certified beyond the possibility of question, we have and hold in our possession an incontrovertible starting point for our computation of the biennium of Acts 24:27: "But AFTER TWO YEARS Porcius Festus came into Felix' room: and Felix, willing to shew the Jews a pleasure, left Paul bound."

That this conclusion is a point beyond dispute, will become still more apparent from a consideration of the fact that the consulate of Vipstanus and Fonteius also represents the pinnacle or peak of the careers of Pallas and Burrhus, the prime ministers of Nero, as required by both Jewish and Roman history. Confer Tacitus, *Annals*, B. XII. S. X. XIV. XV.; and Josephus, *Antiq.* B. XX. C. VIII. §9. For at the time when the change of administration in Judaea was imminent or in the making, a delegation of Jews was sent to Rome with the demand that Antonius Felix, the departing procurator, be called to account for his mismanagement of the province. "Now when Porcius Festus was sent as successor to Felix by Nero, the principal of the Jewish inhabitants of Cesarea went up to Rome to accuse Felix; and he had certainly been brought to punishment, unless Nero had yielded to the importunate solicitations of his brother *Pallas*, who was at that time had in the greatest honour by him. Two of the principal Syrians in Cesarea persuaded *Burrhus*, who was Nero's tutor, and secretary for his Greek epistles, by giving him a great sum of money to disannul that equality of the Jewish privileges of citizens which they had hitherto enjoyed. So *Burrhus*, by his solicitations, obtained leave of the emperor, that an epistle should be written to that purpose. This epistle became the occasion of the following miseries that befell our nation; for, when the Jews of Cesarea were informed of the contents of this epistle to the Syrians, they were more disorderly than before, till a war was kindled."

It seems, therefore, as if no operation could be simpler than a retrogression of two years in order to arrive at the beginning of the biennium which was so outstandingly distinguished by the imprisonment of St. Paul at Cesarea and the production of some of the Epistles of the great apostle which have been ranked among the inspired writings of the Christian Church. But here, again, is the ever-present diversity of interpretation. Take, for an example, the exposition of difficulties as perceived by Anderdon, who (in his *Fasti Apostolici*, p. 87) affirms that "*this* ['after two years. .at the end of the second year of Nero'] seems, chronologically, the most probable interpretation of *διετίας πληρωθείσης* though many modern commentators follow St. Bede, Onuphrius, and others, in supposing St. Paul to have been imprisoned for two

full years in Caesarea. If this was so, he would have been in bonds for Christ during four years altogether in his Apostolic course. The Greek certainly appears to favor this latter view. Baronius, Lorinus, and Scaliger, [however], suppose him to have been apprehended *in the second year of Nero*, and sent to Rome *toward the end of that year* (compare Acts XXVII. 9). The following reasons appear to favor this opinion. 1.) It is difficult to suppose that St. Luke, who seems to have been master of his own actions, should either have left the Apostle in his imprisonment, or, remaining still with him, should have had no event to record during those two years. Especially when this silence is contrasted with the minute details of the after-voyage, and the graphic account he has given of the commencement of St. Paul's imprisonment in Rome. 2.) The injustices and cruelties of Felix in administering the prefecture of Judaea had reached such a height, that it seems unlikely that those influential Jews, who proceeded to Rome on his disgrace, to accuse him before Nero (Joseph. *Antiq.* XX. 7). should have waited for two whole years without some movement for his dismissal. 3.) Neither Festus in his answer to the Jews, in Jerusalem and his address to Agrippa, nor St. Paul in his pleadings, make any allusion to so long a detention. 4.) Felix in his interviews 'often times' with his prisoner, would have given St. Paul an opportunity of putting in his appeal to Caesar, of which it seems very unlikely that he should not have availed himself within two years:—eager as he must have been to bear witness to the truth in the Eternal City; compare Acts XIX. 21; XXIII. 11. If we suppose the 'two full years' to begin with the prefecture of Felix in Judaea, to which he was appointed by Claudius towards the close of that Emperor's reign, a second and concurrent reason is afforded for St. Luke's expression *διετίας πληρωθεΐσης*. On the other hand, if we take the words to indicate a two years' imprisonment, the date of our Lord's Nativity will be thrown back to U. C. 750 (see *Introduction*, p. VII.)"

Reduced to as many points, the drift of the arguments here presented is derived:

- 1.) From the inactivity of Luke the historian;
- 2.) From the inactivity of the Jewish delegation;
- 3.) From the inactivity of Festus, the new procurator;
- 4.) From the inactivity of Felix, the demoted governor.

1.) Assuming now that the final terminus of the biennium in question is unalterably established and distinguished from others as the consulate of Vipstanus and Fonteius in J. P. 4772 or 59 A. D., we may first inquire into the characteristics of the preceding two consulships, which enter into the count of "two years" either in whole or in part. It will be a distinct surprise to note

that the very first sentence of the Roman annalist contains a characterization of the first consulate in question. He says (*Annals* B. XIII. C. XXXI): "Nero with Lucius Piso for his colleague, entered on his *second consulship* [A. U. C. 810; A. D. 57]. *In this year we look in vain for transactions worthy of the historian's pen.*" Is it surprising, then, that when the great world at Rome nodded, the little world at Caesarea should be found napping? Again, if Tacitus scorned to report the ephemeral news of a city journal or the common chat of gossips at the gate, should Luke have condescended to enscripture the daily happenings of provincial prison life? And if, moreover, the biblical historian, who set out to write the "Acts" but not the "Words" of the Apostles had no such exaggerated regard for the epistles of the apostles as fundamentalists of a later day conceived for them, should he nevertheless be expected to aggrandize the writing of a few letters into outstanding "acts" deserving of special mention? If so, he has certainly failed to appreciate the only deeds possible for the apostle if the detention in old Strato's Tower at Caesarea was a sombre fact and not a mere farce. But the Christian chronicler did not entertain such supererogatory views of his own writings or of the scriptures of prophets and apostles, and therefore his inactivity during this biennium was fully justified.

2.) As for the supposed inactivity of the Jewish delegation to Rome, during this double-dozen of months or "two full years," this, too, is fully vindicated by the facts in the case. Not only did Paul, in his speech before Felix, allude to the length of his mal-administration, saying "Forasmuch as I know that thou hast been," not of merely two, but "*of many years* a judge unto this nation" (Acts 24:10), but Tacitus (in his *Annals* B. XII. C. LIV) relates how "Felix, who had been for some time governor of Judaea," came perilously near condemnation "during the consulship of Faustus Sylla and Salvius Otho" [A. U. C. 805 or 52 A. D.] This consulate was not located "toward the close" of the reign of Emperor Claudius, meaning the closing days of the last year, but the whole of the last two years of his total of fourteen. "To make an end of all difficulties, Quadratus placed Felix on the tribunal among the judges, and, by that measure, sheltered him from his enemies." The infelicitous prefecture of Felix, therefore, obtruded its obnoxious long duration through at least six terms of consular administration, and the patient waiting of the Jews, influential and prominent as well as proletarian, persisted and prevailed, not only through two full years under Claudius, but through and through TWICE TWO full years under Nero as well. The alleged inactivity of the Jewish grievance committee, accordingly, finds not only verification in history, but absolute vindication, too, in popular psychology.

3.) The failure of Festus, in response to the remonstrations of the Jews, to refer to the long duration of Paul's detention in Caesarea, is certainly unaccountable. In the interest of biblical research if not in justice to the illustrious prisoner at the bar, he should have stated the truth, the whole truth, and nothing but the truth. But in fairness to the incoming prefect, it should be submitted as a fact that he himself is not even mentioned by Tacitus or Suetonius. Inconspicuous, if not obscure, his brief career did not impress itself upon the historian's mind as one of great importance. Beyond some drastic action against the bandits and brigands of the country, he did nothing, or perhaps could do nothing, to make himself famous. His chief claim to fame rests on his fair dealing with Paul, one of the many prisoners in the many Roman jails. This not uncommon circumstance may account for his inattention to the length of Paul's imprisonment.

4.) The inactivity of Felix, on the other hand, during Paul's overlong detention in durance vile, is quite another matter. As we have seen, Antonius Felix, in conjunction with his brother Pallas and their mutual master Nero, was one of those titled malefactors in office who formed that sinister constellation of evil influences which exerted their powers so disastrously for the Jewish people. Like master, like man. As Nero, the prince of prodigality and rapacity, not only ravaged all Italy as well as the empire, but taxed the very gods by rifling their temples of their votive adornments and even the very statues of the gods themselves (Tac., *Ann.* XV. XLV.); as Pallas, the ruling favorite of both Claudius and Nero, indulged his lust for exploiting the provinces and plundering the people to such an excess that even his masters were shocked and constrained to put a stop to it (Tac. *Ann.* XIII. XIV. and Suet. in *Claud.* S. 28); and as even Afranius Burrhus, the emperor's minister of the arts and sciences, called by Tacitus "the friend of upright measures" (*Ann.* B. XIV. C. 14, 15), was bribed by "a great sum of money to disannul that equality of the Jewish privileges of citizens (Jos. *Antiq.* B. XX. C. VIII. §9): so Felix Antonius the governor of Judea then, "hoped also," as the author of the Acts (24:24) declares, "that money should have been given him of Paul, that he might loose him," and then adds significantly, "wherefore he sent for him the oftener," or very frequently, "and communed with him." But however frequently they got together and joined in weighty conversation or common chat, neither the frequency nor the familiarity of these talks could prevail on Paul to commercialize a matter of right and justice, and as for a fair show or a possible chance for fair play, during these two last and worst years of Felix mal-administration, there simply was none. Paul saw that his prospects for a release were nil, and consequently refrained from futile

efforts. How long or how often the apostle repelled the confabulations of Felix, the term *πικνότερον* does not indicate. Suffice it to state, as a matter of fact, that the exponent of the gospel of the suffering Nazarene did not surrender his high ideals of fairness and justice so long as the venal prefect was in power. He preferred to remain inactive for two long years,—a double twelve-months,—from the *third* to the *fifth* regnal year of Nero Claudius Caesar, 57 to 59 A. D.

This biennium of imprisonment, then, to which the energetic apostle was so ingloriously condemned, being historical and well established in the category of facts, must in its very nature and capacity as a period of time, have possessed a number of proper and peculiar characteristics which served, not only to differentiate these "*two years*" from others in close connection, but also to identify them as the very same "*two years*" required by their chronological and psychological descriptions. The following are a few of the considerations which serve to confirm and corroborate the choice of these two years as the doublet comprising the pilgrimage of Paul to Jerusalem, his imprisonment at Caesarea and his consequent remission to Rome upon the arrival of Festus.

The moving cause of Paul's very urgent journey to Jerusalem is to be found in the need of that charity which prompted him to bring alms and offerings on that festival for the benefit of the nation. The year of Sel. 368, which almost paralleled A. U. C. 809, had been a year of rest and refrain from the toil of tilling the soil, and therefore a year devoid of a harvest. As usual, a year of famine succeeded the Sabbatic abeyance from productive industry. The year Sel. 369 or A. U. C. 810 (Varro) was therefore a year of want and famine. The prevalence of poverty in 57 A. D., indicated by the mission of charity carried out by the apostle Paul (Acts XXIV. 17; I Cor. XVI. 2) and the prevalence of crime and lawlessness reflected in the bearing of all classes of the population (see Jos. *Ant.* XX. IX. §8), were features of the second consulship of Nero and Calpurnius Piso (57 A. D.), which appeared as consequence of the accustomed causes; viz.: the non-production of the necessities of life and the unwarranted participation in the provisions at hand by the parasitic elements of the population. These Paul sought to alleviate and prevent. And if, by his insistent desire "to be at Jerusalem the day of Pentecost" (Acts 20:16), he hoped to accomplish anything, it was not a perpetuation of the tithing system, as it was then administered, but a prevention of its abuse or a total abolition of a wise provision perverted into a code of legalized plunder and official exploitation. He knew that the scribes and Pharisees, the sacerdotal authorities and dignitaries of the church, not merely exhorted the people to contribute to the fund for the relief of the

poor; he knew, too, that they extorted their tribute of tithes as their dues as well, using their office as functionaries of the state as well as officials of the church to enforce their demands by violent measures. "Such was the impudence and boldness that had seized on the high-priests," says Josephus (*Antiq.* B. XX. C. IX. §8), "that they had the hardihood to send their servants into the threshing-floors, to take away those tithes that were due to the priests, insomuch that it so fell out that the poorer sort of priests died for want." So the poor at Jerusalem were badly in need of the apostle's help.

Nor were the privations of poverty and famine the only phenomena pointed out by sacred and profane historians. The usual relation of taxes and tumults appeared in the following year Sel. 370, A. U. C. 811, or 58 A. D. For, as if the occurrence of one calamity were not enough, another heap of disasters accrued to the Jews in the execution of the quinquennial census of 58 A. D., the lustre of which fell in the spring of the succeeding year. It may be safely asserted that the commotions in Syria recorded by Josephus (*Antiq.* B. XX. C. IX. §§7-10) and Tacitus (*Ann.* B. XIII. C. XXXIV. XXXV), in the consulate of Nero III and Messala Corvinus, were the direct outcome of the registration of persons and the assessment of property, which necessarily preceded the collection of tribute and taxes. So great were the consequent privations, and so general the justifiable complaints, both in the capital and in the provinces, that Nero for a time contemplated abolishing all duties and taxes instead of proceeding to the collection of them. Upon second thought, however, he compromised on a change of administration for Syria, and, with the summer of 59 A. D., sent Porcius Festus to take the place of Felix, the legal chief publican. That was the consulship of Vips-tanus Apronianus and Fonteius Capito, the same in which the confinement of Paul in Caesarea came to a close, due to the intervention of Festus and the appeal of the apostle to the rights of a Roman citizen, to demand a hearing in the courts of Caesar.

This, then, was the incontestable termination of the apostle's captivity in Strato's Tower, and, since his arrest took place "*two years*" before, his detention in the custody of Caesarea began on the Pentecost of 57 A. D. These "*two years*" of his confinement corresponded with the twin years of privation and taxation, or, as I Macc. X. 31 puts it, the people's suffering "*both from tenths and tributes.*" How any other couplet of years can possibly be chosen for the apostolic biennium of imprisonment, is not patent to our view. Taking together such detailed descriptions and such casual references as those of Josephus (*Antiq.* B. XX. C. VIII. §9) and Tacitus (*Annals* B. XIV. SS. X. XIV. XV) to Burrhus, the tutor of Nero in the fine arts and sciences, in the same consulship

of Vipstanus and Fonteius Capito, confirming the identity this twelvemonth with the year of Paul's trial before Festus, it is obvious enough, without still further proof, that, in the year of grace 57 A. D. we must seek and find, (if our efforts are to be vindicated as correct) such calendric conditions as shall meet and satisfy the historical data presented in the Acts.

Now what are the calendric conditions which can, and certainly will, prove decisively whether the year we have arrived at (A. D. 57) is indeed the year of Paul's apprehension at Jerusalem and consequent imprisonment at Caesarea? If we may take for granted that the "*five days afterwards*" of Acts 24:1 are the last five of the "*twelve days*" of Acts 24:11, the preceding seven obviously constitute a week and were identical with the "seven days of purification" (Acts 21:27) imposed on themselves by Paul and his companions. It follows, then, that if the "*fifth day afterwards*" was so enumerated because it was the fifth day of a regular week or Thursday, the seventh day of the preceding seven was also in this sense the "seventh" that it was a regular Sabbath or Saturday. In this case it was the preeminently sacred Sabbath of the seventh week after the Passover, the feast-day Sabbath of Pentecost itself. If the inferences we have drawn be correct, it was even a compound Sabbath-day, the festival and weekly Sabbath consolidated in one day. It was therefore not surprising that the fanatical devotees of sabbatarianism and peritemnism should stand aghast at the double-dyed profanation of time and place by the illicit introduction of Titus into the Temple on the great "FIFTIETH" of the feast of weeks. The apostle was accordingly seized by the temple guards and thrust into custody. How overflowingly full of chronological detail is this one historical test-case! If we have one of the seven Pentecostal Sabbaths dated, we have them all dated. If the last of the "fifty days" was a Sabbath, the first, eighth, fifteenth, twenty-second, twenty-ninth, thirty-sixth, forty-third, as well as the fiftieth, were Sabbaths. And if the fiftieth day, which was the sixth of Daesius or Sivan was a Sabbath, then the twenty-eighth, twenty-first, fourteenth, and seventh of Artemisius or Iyar, and also the thirtieth, twenty-third and sixteenth of Xanthicus or Nisan, were Sabbaths. Or, clothing this skeleton with the living flesh of historical facts, the concluding Sabbath (eighth) of the Pentecostal period was the Great Sabbath of the Feast itself. The Sabbath before it, the *seventh* of the series, was spent with the family of Philip the evangelist, as was also the *sixth*, being the day of Paul's arrival at Caesarea. The *fifth* Sabbath in line was the memorable occasion when the apostle delivered his valedictory address to the elders of Ephesus at Miletus; while the *fourth* and the *third* were the octavian week-ends which included

his stay at Troas. The *second* of the series concluded the tale of nine Passover holidays that year, the octave of this last Passover holiday being the *first* day of the Pentecostal count, itself a regular week-day Sabbath preceded by the feast day Sabbath of the Passover celebration on Friday. Reversing these dates into their natural, numerical order, and translating them into the terms of the Syro-Macedonian calendar then in use among the Jews, we obtain the following catalogue of conditions requiring fulfillment before a verdict of proven can be rendered.

Xanthicus or Nisan	15 = 0	Friday at Philippi.
	1 = 1	
Xanthicus or Nisan	16 = 1	Sabbath at Philippi.
	7 = 7	
Xanthicus or Nisan	23 = 8	Sabbath at Philippi.
	7 = 7	
Xanthicus or Nisan	30 = 15	Sabbath at Troas.
	7 = 7	
Artemisius or Iyar	7 = 22	Sabbath at Troas.
	7 = 7	
Artemisius or Iyar	14 = 29	Sabbath at Miletus
	7 = 7	
Artemisius or Iyar	21 = 36	Sabbath at Caesarea.
	7 = 7	
Artemisius or Iyar	28 = 43	Sabbath at Caesarea.
	7 = 7	
Daesius or Sivan [35 - 29 =]	6 = 50	Sabbath at Jerusalem

If it were necessary, or desirable, to adduce, not exactly another condition to be met, but a more directly expressive version, of one of the subsidiary postulates already propounded to be fulfilled, it would be easy to show that, in order to suit the exigencies of the case, the Little Passover of Lag B'Omer, incident on the fourteenth of Artemisius or Iyar (Num. IX. 11), should, in this year of the Seleucidae 369 or of the Christian Era 57 A. D., fall on a Sabbath or Saturday, not on a Sunday or Friday. This condition, of course, will be patent to the eye from the scheme above when applied to the form of the Julian calendar. That is to say, To what days of the Julian calendar do the Hebrew dates registered above apply or conform by chronological location? We may lay the foundation for the recalculation of all the years that can possibly enter into our account by computing the time when the Seleucic year 366 ended and 367 started in the spring of the Julian year J. P. 4768 or 55 A. D., choosing this year

because so eminent and able a scientist as Petavius decided on 55 A. D. as the date of Paul's fifth and last visit to Jerusalem and his consequent detention at Caesarea.

If we eliminate the first four years (Sel. 363-366) from our reckoning, we shall have only the last fifteen years of the first nineteen-year cycle of the VIth Calippic Period and a fraction of the first year (Sel. 382) of the second nineteen-year cycle of the same period to contend with. We may compute this fifteen year interval between the fourth year of this Period and its twentieth according to both calendars:

<i>Jewish</i>	<i>Julian.</i>	
Sel. 381	69 A. D.	
—366	—54 A. D.	
<hr/>	<hr/>	
354 × 15	365 × 15	365 × 15
<hr/>	<hr/>	<hr/>
1770		1825
354		365
<hr/>		<hr/>
5310		5475
180 d. in 6 emb. mos.		4 l. y. ds.
1 d. ext. int.		218 ds. in 70 A. D.
127 d. in Sel. 382		<hr/>
1 d. ext. int.		5697 d.
<hr/>		from Jan. 1, 55 A. D.
5619 d.		to Aug. 6, 70 A. D.
from Xan. or Nisan 1, Sel. 367,		
to Löus or Ab 9th, Sel. 382.		

Deducting the 5619 days on the Jewish side from the 5697 days on the Julian side of the ledger, the remaining seventy-eight days will correspond with the last seventy-eight days of the Asmonean-Herodian Era, which, showing $85330 - 5619 = 79711$ days elapsed, ends the 366th year of the Seleucidae on the seventy-eighth day of J. P. 4768 or 55 A. D. Advancing a Jewish year of $354 + 30 = 384$ days into the following year, the 367th year will end on the 80095 .. 96th day in 56 A. D. And in the next, the 368th year Sel. will terminate on the 354th day thereafter, viz. on the $80095 + 354 = 80449$ th day .. 85th day in 57 A. D. Beginning with this correlary we may work out the Julian dates for all the data registered in the above account.

Sel. 368, Adar 29th = 0 .. 85 = Thursday, March 26, 57 A. D.
15 15

Sel. 369. Nisan 15th = 15 .. 100 = Friday, April 10, 57 A. D.

Sel. 369, Nisan 16th = $\frac{16}{7} \dots \frac{101}{7}$ = Saturday, April 11, 57 A. D.

Sel. 369, Nisan 23rd = $\frac{23}{7} \dots \frac{108}{7}$ = Saturday, April 18, 57 A. D.

Sel. 369, Nisan 30th = $\frac{30}{7} \dots \frac{115}{7}$ = Saturday, April 25, 57 A. D.

Sel. 369, Iyar 7th = $\frac{7}{7} \dots \frac{122}{7}$ = Saturday, May 2, 57 A. D.

Sel. 369, Iyar 14th = $\frac{14}{7} \dots \frac{129}{7}$ = Saturday, May 9, 57 A. D.

Sel. 369, Iyar 21st = $\frac{21}{7} \dots \frac{136}{7}$ = Saturday, May 16, 57 A. D.

Sel. 369, Iyar 28th = $\frac{28}{7} \dots \frac{143}{7}$ = Saturday, May 23, 57 A. D.

Sel. 369, Sivan 6th = 6 .. 150 = Saturday, May 30, 57 A. D.

Now the most cursory survey of this prospectus, with its double line of data doubly dated, ought to convince anyone that a calendar which meets and satisfies this long array of postulates, must have the elements of accuracy and consequent identity with the original so well exhibited in the face and features of it that there can be no doubt of its being an authentic reproduction. Nevertheless we wish to stress a datum already alluded to more emphatically in this place because it is so generally overlooked that it is almost totally ignored. We refer to the date of the Little Passover or Lag B'Omer on the fourteenth day of Artemisius or Iyar, which St. Paul, willingly or unwillingly observed because it fell on a Sabbath, or Saturday, the ninth day of May, 57 A. D.

It is a fact too obvious to be denied, that, when "from Miletus Paul sent to Ephesus, and called the elders of the church" to come to him, the day before the meeting permitted travel or the labor of locomotion, while the day of the meeting did not. To cover distance, the apostles had pressed past Ephesus while the going was good, but rested or refrained from travel when labor was prohibited and progress precluded. One of the most prevalent causes to prevent action in those days was the ceremonious sanctity of certain days. The rate at which the apostle travelled makes it probable that, when he was abreast of Ephesus, he was chronologically approaching a day of rest. One day apiece at Assos, Mitylene, Cnios, Samos, Trogyllium, and Miletus (Acts XX. 13-15), after leaving Troas on Sunday, makes the day of the week when Paul passed Ephesus either Thursday or Friday, but almost certainly Friday when he reached Miletus and sent for the elders of Ephesus. It was at least Friday evening when Paul despatched his runner, and Saturday morning when the elders accompanied the messenger back to Miletus. The meeting

of Paul and the elders took place then at noon or in the afternoon of that Sabbath which at the same time happened to be the Lag B'Omer or Little Passover, for the benefit of belated pilgrims, on the fourteenth of the second month (Num. IX. 11). At sundown, that is, at the close of the Sabbath and the minor Paschal Feast, the apostle and his party launched from Miletus.

On the other hand, the rapidity with which the ports of Coos, Rhodes, and Patara (Acts 21:1) are disposed of is highly suggestive of the fact that there was no break or interruption in this stage of the ship's cruise by the intervention of a day of rest. If, in the course of this eight-days' cruise there was any Sabbath at all (and there must have been by the testimony of the whole Asmonean-Herodian Era), that day of respite must have preceded the launching from Miletus. In fact, it must have been that very period of waiting that the apostle put in at one of the ports of Miletus, while his fleet-footed courier hastened back to Ephesus and hurried the elders of the church with him to Miletus. What was the message or the motive of the apostle's action does not concern us, except in so far as it reflects the chronological conditions of his voyage. The day of his disembarkation was a Sabbath. It was even a feast-day Sabbath, ordained by the law for the good of travellers who, for some cause or other, had failed to celebrate the great Passover Feast in the first month of the sacred year. As such was observed and solemnized by the apostle's party after having passed the port of Ephesus on purpose, which was to take advantage of the permission to sail while the sailing was good, and to avail himself of all religious privileges peculiar to the following day. So this becomes an outstandingly important contingency which must be reckoned with in the reconstruction and arrangement of any Jewish calendar.

However, to be a true-to-life, matter-of-fact ephemeris or almanac the calendar of this year 57 A. D. must chime with all of the conditions propounded and placed without discord. At the same time, it must be plainly shown that these conditions are not, and cannot be, in harmony with the calendars of any of the years that can possibly be brought into consideration. The question, therefore, obtrudes itself. Does the calendar we have rebuilt on the basis of data hitherto discussed comport or accord with the events of this year, or do calendric data and historic dates clash discordantly in chronological confusion?

In order to enable us to make the necessary comparison as to all the years suggested as dates for these events, we shall compute the calendric conditions of the seven years comprised in the questionable period, 55 to 61 A. D. Reverting to a former paragraph, we may begin our calculations with the equation: The 79711th day of the Asmonean-Herodian Era corresponds to the seventy-eighth day of the Julian year J. P. 4768 or 55 A. D.

	<i>Jewish</i>	<i>Julian.</i>	
79711	79711 ..	78 d. in 55 A. D.	78
15	177	177	50
50	30	30	
	177	177	143 =
7)79776			55GF Wed., May 22
11396+4		462	
80095		-366 d. in 55 A. D.	
15	80095 ..	96	96
50	354	354 d. in Sel. 368	15
			50
7)80160		450	56E
11451+3		-365 d. in 56 A. D.	161 =
80449	80449 ..	85	Tues., June 10
15	354	354 d. in Sel. 369	85
50			15
		439	50
7)80514		-365 d. in 57 A. D.	150 =
11502+0	80803 ..	74	57D Sat., May 30
80803	177	177	74
15	30	30	15
50	177	177	50
			139 =
7)80868		458	58C Wed., May 19
11552+4		-365 d. in 58 A. D.	
81187	81187 ..	93	93
15	354	354 d. in Sel. 371	15
50			1
		447	59 BA
81252		-366 d. in 59 A. D.	50
			159 =
11607+3	81541 ..	81	Wed., June 7
10) Sel. 372 =	354	354 d. in Sel. 372	81
81541			15
15		435	50
50		-365 d. in 60 A. D.	146 =
81606		60G	Sat., May 26
	81895 ..	70	70
11658+0	30	30	15
81895	1	1	1
15	147	147	50
1	30	30	
50	177	177	136 =
			Thurs., May 16
7)81961		455	61 F
11708+5		-365 d. in 61 A. D.	
	82280 ..	90	
82280			90
15			15
50			50
			62 E
7)82345			155 =
11763+4			Wed., June 4

It may be perceived from this symposium of small calculations that, so far as the date of Pentecost, the date of Paul's apprehension, is concerned, it absolutely justifies its connection with the Julian year J. P. 4770 or 57 A. D., on the one side, and on the other, just as emphatically stigmatizes as false the connection of any other year with this event. The only year in which the historical series of events could be made to fit in the framework of that year's calendar is J. P. 4773 or 60 A. D., and that, with its later historical background, is entirely too incompatible with facts to be even mentioned as a possible date for the imprisonment of Paul by any chronographer whatsoever. It is therefore a well-founded conclusion that the year of the Seleucidae 369 and of the Christian Era 57 A. D. is the correct year-date for the final apprehension of Paul, and that the suggested calendar for the year, with Pentecost on Saturday, the thirtieth of May, is the right one, being borne out and upheld by a consistent arrangement of days, months, and years, just as they must have elapsed in the actual course of Jewish events. We might therefore rest our case here and now as well-established.

But there is another incident in the life of Paul which, if not decisively demonstrated, is decidedly confirmative of the conclusion attained by us; that is the voyage, shipwreck, and wintering of the apostle at the termination of his two-years' confinement at Caesarea. This navigating and hibernating experience of the apostolic prisoner happened, of course, in the winter, not in the fall or the spring, still less in the summer or hot season of the year. In other words, we cannot reasonably represent the ship-wreck of Acts 27:44 to have occurred in the loveliest month of autumn ("Bul" or Marchesvan) by placing the *fourteen days* of rough sailing in the month of "Bul" or even of Tisri; nor can we deliberately misrepresent the hibernation of Paul to have fallen in the "pleasant places" of spring, or even summer, by extending his *three months'* stay in Malta into the vernal months of Nisan and Iyar (or Zif). The former is done by those who, like Anderdon (*Fasti Apostolici*, p. 89), follow Baronius and Ussher in making the fast of Acts 27:9 to be the Fast of the Atonement on the tenth of Tisri, the first autumnal month of the Jewish civil year. The latter is done by those who, like Totten (*Our Race*, Series IV, No. 16, pp. 182-190), identify the fast (of Acts 27:9) with the fast for Nebuchadnezzar's siege of Jerusalem on the tenth day of Tebeth [as Totten figures, on the twenty-first of December, 60 A. D.] The one is unconscionably too early, the other in equal conscience too late. The former places the storm tossed voyage and shipwreck of the apostle at a time when Paul was not yet at sea, but in the ecstasy of religious enthusiasm before the judgment-seat of Festus and king Agrippa

and queen Berenice, who had come to the Holy City to celebrate in tents and tabernacles the most free and easy, outing-like jollification of the Jewish people. On the other hand, the latter view locates the resumption of shipping (Acts 28:11) at so late a date that Paul reaches Rome, not shortly after the opening of the sailing season (March thirteenth), but at the very end of spring; and the Acts of the Apostles close with a chronological allusion to the crucifixion and resurrection of Christ, not on the April anniversary of those events, but on the day of Pentecost, "then fully come," on Saturday, May twenty-sixth, 60 A. D., full fifty days and nights procrastinated and belated. It is needless, however, to point out still more violations of the laws of probability apparent in the hypotheses of the chronological schools mentioned.

To approach the semblance of plausibility in any degree, the tempestuous fortnight of Acts 27:33 must be supposed to fall within the storm period of the Praenestine Calendar, and the departure from winter-quarters must coincide or nearly synchronize with the traditional date for the "opening of the sea." The storm period, or winter season "when the Mediterranean is treacherous," as Prof. Totten felicitously puts it, being tantamount to the Bruma or Brumalia, extended "for thirty days" from November twenty-fourth to December twenty-fifth, or intensively for a shorter spell, from December fourteenth to December twenty-fifth. The "opening of the sea," which was considered "closed" by the cautious seafarer on November eleventh, was linked with the thirteenth of March, making the maximum of perilous days ($20+31+31+28+13=$) 123 or 124 at the utmost. Into this framework of chronology, the picture of Paul's experience at sea must fit with ease and grace if the data given in Acts XXVII and XXVIII are historical and have been presented in their proper places.

If, in our effort to define the period of Paul's wintering in the island of Melita "for three months," we assume the final termination to be contemporary and identical with the thirteenth of March, which officially dated the opening of the sea, the first day of hibernation as well as the entire period of fourteen nights and fourteen days of storm and abstinence from food will antedate the traditional date of the Brumalia at their highest. This evidently does not agree with facts. If, on the other hand, we begin to reckon the first of the tempestuous days of Acts 27:14 to be synchronous with the beginning of the Brumalia according to the Praenestine Calendar, the shipwrecked company of St. Paul and the regular crew of the *Castor* and *Pollux* must be supposed to have procrastinated their departure from Malta for seventeen days after the customary opening of the sailing season (March

thirteenth to March thirtieth). This, again, is inconceivable. We must, therefore, proceed in a different manner.

When we consider that the fourteen nights and fourteen days of Acts 27:33 (comp. Gen. 1: 5. 8. 13. 19. 23. 31 and 2:2) represent a perfectly orthodox Jewish fortnight, ending with a Sabbath or "seventh" day and beginning with a Sunday as "*first*" day, it is evident that this "*first*" day of this double-week and of this tempestuous wind (Acts 27:14) must be the *first Sunday* comprehended in the eleven-day period of the Brumalia prevailing from December fourteenth to December twenty-fifth. The "*first*" day of this period, December fourteenth, being a Thursday (see Cal. BA), the first *Sunday* thereafter would be December seventeenth, the fourth day of the traditional Brumalia, and therefore the day on which the fourteen days' storm and distress of the apostolic company began. The tempest continuing till the fourteenth day, continued five days longer than the usual Euroclydon, making the end of the storm to fall on the Sabbath, or Saturday, December thirtieth. The ship was beached and broken to pieces on the following day: consequently the shipwreck occurred on Sunday, the thirty-first of December, J. P. 4772 or 59 A. D.

With the date of the shipwreck as a basis, we may proceed, first, to determine the date when the Castor and Pollux' crew and the floundered ship's company left winter-quarters, and then, to ascertain what "*fast*" it was that "*now already past,*" occurred at a time "*when much time was spent*" because of the sailing's being slow and dangerous due to the wind's not suffering the ship to make headway.

Since it is not probable that the ship's crew would desire to prolong their stay in the island and not at all plausible that the wrecked ship's company would insist on remaining behind after the regular opening date had proffered deliverance from the ordeals of a long winter's detention, the conclusion is not unduly forced that St. Paul's winter abode in Melita ended approximately with the official or conventional opening of the sailing season. That would make the duration of his stay in Malta from the first of January to the thirteenth of March about seventy-two days. But since the thirteenth of March, J. P. 4773 or 60 A. D., according to Cal. G., was a Tuesday [$81532 \div 7 = 11647 + 3$], and the fourth day of the sailing season, March seventeenth, was a Sabbath, we must hark back six days from this Seventh day to recur to the day when St. Paul and his company departed from Malta. For, taking into account one day on the way to Syracuse, three days in the port of Syracuse itself, and one day en route to Rhegium, with another day, which was a "*seventh*" to follow, it follows as a matter of course that the day on which St. Paul and his companions left Malta on the *seventh* day before the seven-

days' sojourn at Puteoli (Acts 28:14) was Sunday, the eleventh of March, the seventieth day of the Julian year J. P. 4773 or 60 A. D., or the 81530th day of the Asmonean-Herodian Era. This shows that the "three months" of Acts 28:11 must be interpreted in the sense of "in the third month," being equivalent to the last twenty-two days of Tebeth, the full thirty days of Shebat, and the first eighteen days of Adar, Sel. 372.

Reverting to the time before the shipwreck, which happened on December thirty-first, 59 A. D., we may now endeavor to ascertain the date of "the *fast* already past" (Acts 27:9). We may visualize the calendric situation surrounding the voyage of St. Paul to Rome in the winter of 59 to 60 A. D. in terms of the Julian and the Jewish calendars in the following fashion. Since November eleventh, the official closing day for seafaring in ancient times, was the 316th day of the leap year 59 A. D., and the preceding Seleucic (Jewish) year Sel. 370 terminated on April second, as the ninety-third day of the Julian year or the 81187th day of the Jewish-Roman or Asmonean-Herodian Era, the difference of 223 days added to the latter date, will make November eleventh, the end of the sailing season, the 81410th day of the count; November twenty-fourth, the beginning of rough weather, the 81423rd; December fourteenth, the beginning of severe cold and real wintry weather, the 81443rd; and December twenty-fifth, the end of the more intense Brumalia, the 81454th day of the Era. As we have seen, the date of the shipwreck must be placed on the thirty-first of December, 59 A. D., which, having the week-day character of a Sunday, would be the fifth day after the calendric termination of the Brumalia. The catastrophe would thus be placed at the expiration of the stormiest period of the eleven-days' Brumalia. Reduced to terms of the Jewish (or Syro-Macedonian) calendar, the difference of 236 days between the second of April or Adar twenty-ninth, Sel. 370, and the twenty-fourth of November, the first day of the milder form of Bruma, being equal to the first half of Sel. 371, i.e. 177 days plus thirty days in Tisri or Hyperbereteus, plus twenty-nine days in Dios or Marchesvan, will make the beginning of rough weather (November twenty-fourth) coincident with the 81423rd day of the Asmonean-Herodian Era, which would be, not only the last day of Dios (or Chesvan), but already the eleventh day after the close of the sailing season (on November eleventh). Navigation during these thirteen days from the customary cessation of shipping to the setting in of wintry winds is characterized in the scriptural account as impeded by contrary winds and cautious sailing. "When we had sailed *slowly* MANY DAYS,—the wind not suffering us." (Acts 27:7) This was "*many days*" before the "FAST", consequently not in the month of November or the Hebrew month Chesvan or "Bul," still less in the month of

October or the Syrian month Hyperberetaeus (or Tisri). The "many days," being part of the milder form of "Bruma" or "Brumalia," as they are designated in the Roman almanac, did not bring on the fourteen days of privation, and the subsequent shipwreck, but the "much time spent," contra distinguished from the "many days," certainly did. The "many days" were disadvantageous, in that the winds suffered not the voyagers to make perceptible progress. The "much time spent," on the other hand, was decidedly "dangerous," in that it brought on real suffering, seasickness, starvation, and downright destruction in the sea. The "fast" was, therefore, at a time when the stricken seafarers fancied that they had penetrated the depths of winter as deeply as it was possible for them to go (without emerging on the subsiding or diminishing side of Euroclydon) but, though they had already passed the terminal of the storm period, as usually reckoned, the end had not yet come. Evidently the reference is to the only notable holiday within the duration, and near the rear end of the extreme storm period—the feast of Dedication. True, it does appear anomalous to hear this "feast" pronounced a "fast," but then we have seen this done before, viz., when the feast of Pentecost was denominated a "fast" by Josephus, when dating the capture of Jerusalem by Pompey and by Herod. We, therefore, are decidedly persuaded that the "fast" which preceded the shipwreck of St. Paul was nothing else than the feast of Dedication or reconsecration of the Temple.

A clear conception of the relation of facts and figures in this case may be obtained from the following representation.

		<i>Paul's Voyage to Rome</i>	
		<i>Jewish Cal.</i>	<i>Julian Cal.</i>
Sel. 371, $\frac{1}{2}$ y. =		81187 .. 177	93 d. in 59 A. D. (Cal. B. A.) See p. 534 177
Tisri		81364 .. 10	270 d. Tues., Sept. 26, End of year 371. 10
Tisri		81374 .. 20	280 d. Fri., Oct. 6, Fast of Atonement. 20
Chesvan		16	16
Chesvan		81410 .. 13	316 d. Sat., Nov. 11, Closing of the Sea. 13
Casleu		81423 .. 15	329 d. Fri., Nov. 24, Bruma for 30 ds. 15
Casleu		81438 .. 10	344 d. Sat., Dec. 9, Bruma began. 10
		81448 ..	354 d. Tues., Dec. 19, Dedication.

Casleu	4	4	
	81452 ..	358 d. Sat., Dec. 23,	14th day of Fasting.
Casleu	1	1	
	81453 ..	359 d. Sun., Dec. 24,	Shipwreck (Acts 28:7).
Tebeth	1	1	
	81454	360 d. Mon., Dec. 25,	End of Brumalia.
Tebeth	6	6	
		366 d. Sun., Dec. 31,	59 A.D.
		—366 d. in 59 A.D.	
	81460 ..	0	
Tebeth	22	22	} 70 ds. to Mar. 11, 60 A.D. (Cal. G).
Shebat	30	30	
Adar	18	18	
	81430 ..	70 ds. Sun., Mar. 11,	11th day of 3rd mo.
Adar 19th	1	1	Day before Opening of the Sea.
	81531 ..	71 d. Mon. Mar. 12,	Sailing resumed.
Adar 20-22	3	3	ds. at Syracuse (Acts 28:12).
	81534 ..	74 d. Thurs., Mar. 15.	
Adar 23	1	1	d. Fetching Compass.
	81535 ..	75 d. Fri., Mar. 16.	
Adar 24	1	1	d. at Rhegium (Acts 28:13).
	81536 ..	76 d. Sat., Mar. 17.	
Adar	5	5	} 7 d. at Puteoli (Acts 28:14).
Nisan	2	2	
	81543 ..	83 d. Sat., Mar. 24	
Nisan	13	13	d. to Passover.
	81556 ..	96 d. Fri., Feast of Unleavened Bread.	
Nisan	15	15	} 50 d. to Pentecost.
Iyar	29	29	
Sivan	6	6	
	81606 ..	146 d. Sat., May 26,	Pentecost.

The termination of Paul's itinerary with the end of his Rome-ward voyage, and with it, the last specific date of the canonical chronicle, is of particular interest and value to us because its timely delineation and trenchant demarkation conduces decisively to the final location of the fourth extra-intercalary day in the structure of the ancient Jewish and Syro-Macedonian Metonic cycle. The date referred to (Acts 28:17) is arrived at like this:

No sooner had the apostle resumed his Romeward progress than he was all aflame with desire to preach the gospel also in Rome. Landing after at least one day's voyage at Syracuse, and tarrying there three days, he took ship next day to Rhegium, and

remained there another day. Then, sailing with a favorable south wind next day, he arrived at Puteoli, where he not only found brethren and spent the Sabbath preaching and teaching, but, upon desire, stayed with them to the week's end. So, when he had tarried with them seven days, he proceeded by way of Appii Forum and the Three Taverns to Rome, covering a distance of about 125 miles. He reached Rome in time to absolve the week's preparation for the solemn observance of the Passover, which, in this instance, was the 81555th day of the Jewish-Roman Era. For $81536 + 7 + 7 + 5 = 81555$. Or, $81187 + 354 + 14 = 81555$. But the fourteenth of Nisan or Xanthicus was the first day of Sabbatarian intent, of which the historian says there were three. The first, the fourteenth of Nisan, was semi-sabbatic because, as a Thursday, it was always a half-holiday; the second, the fifteenth of Nisan, was Sabbatic because the Passover ordinance made it so; and the third was a Sabbath because it was a seventh day of the week, divinely consecrated and devoutly sanctified by the ancient usage of men. Hence it was the Passover feast which so brought about a triplication of "rest" days, that the apostle, though himself not a Sabbatarian, was compelled to rest these "three days" before he could, or would, dispatch his challenge to the chief men of Judaism at Rome. Then, on the following Lord's day, he availed himself of the anniversary character of those days to broach the relation of Jesus Christ to the kingdom of God, and to expound and prove from the prophets what was the purpose of God in Him.

With regard to the final emplacement of the extra four leap-year days, or "Badhu," required in the construction of every nineteen-year calendar cycle, we now see from the juxtaposition of these three sabbatarian days, which is possible only in the circumstances stated, that, if a bissextile or extra intercalary day had been injected into the body of the cycle previous to their historical instance, they would have been prevented by their dislocation, from coinciding with Thursday the fifth, Friday the sixth, and Saturday the seventh, of April, 60 A. D. But if the intercalation of the *fourth* leap-year day would have had the effect of dislocating the calendar to the extent of a whole day, it is evident that this intercalation did not take place until after the Passover of 60 A. D. We have before this learned from the date of the conversion of Cornelius that a leap-year augmentation did not take place before the Pentecost of that year, which was the tenth year of the cycle and from the date of John Hyrcanus' campaign against the Parthians that it did not occur previous to that Pentecost, which fell in the tenth year of the cycle: consequently, to happen at all, it must have found its bissextile location at the end of the month Nisan in the eleventh year of every lunar cycle. And so we have again vindicated the arrangement of one of the most difficult of the minute adjustments of the ancient Jewish Calendar.

THE CRUCIFIXION AND RESURRECTION

of

JESUS CHRIST

The next and only remaining date selected by a number of noted chronologists as a means of reconstructing the Jewish calendar as used in the time of Jesus is the date of His own death by crucifixion. It is the type of the annalistic, or year-by-year style. Thus Tacitus, for instance, dates the twelvemonth during which the fifteenth year of Tiberius ended, thus: "During the consulship of Rubellius Geminus, and Fusius, who bore the same surname [A. U. C. 782 (Varro) A. D. 29], died, in an advanced old age, the emperor's mother Livia, styled Julia Augusta" (*Ann.* B. V. C. I). And the year in which the same fifteenth year of Tiberius began, he states thus: "Junius Silanus and Silius Nerva were the next consuls. The year began [A. U. C. 781 (Varro), A. D. 28] with a transaction of the blackest dye." (*Ann.* B. IV. C. LXVIII). In the same style and type the gospel-writer St. Luke, who follows closely the primordial outline of St. Mark's gospel, describes the year in which the Great Subject of this sketch was most active and finally the victim of His own activity, in the following manner: "IN THE FIFTEENTH YEAR OF THE REIGN OF TIBERIUS CAESAR, Pontius Pilate being governor of Judea, and Herod being tetrarch of Galilee, and his brother Philip, tetrarch of Iturea and the region of Trachonitis, and Lysanias the tetrarch of Abilene, Annas and Caiaphas being the high priests, the word of God came unto John, the son of Zacharias, in the wilderness". (Luke 3:1.2) "And it came to pass *in those days*, that Jesus came from Nazareth of Galilee." (Mark 1:9) "Then came *the day of unleavened bread, when the passover must be killed.*" (Luke 22:7) "And *that day was the preparation, and the sabbath drew on.*" (Luke 23:54).

These statements, taken in conjunction with their parallels in the Synoptic gospels and in comparison with the words of institution of the Paschal holiday (Ex. 12:6.81) and the records of historical precedents (2 Chron. 35:1; Ezra 6:19), would seem to furnish as clear and unmistakable a time-determination as any to be found anywhere, yet, for all that, it has proven itself, like Cain, the "fugitive and vagabond" among chronological definitions. Commenting on the apparent definiteness of this date (in his book *Jesus the Man*, p. 15ⁿ), Victor E. Harlow declares it "the only date connected with the life of Jesus which can be determined with any degree of accuracy." On the head of this asser-

tion we would say: This, too, is at the same time the only date we need, and the one date all-sufficient, to locate the life and death of Jesus with absolute precision. In deference, however, to the hundreds and thousands of learned and able men who have honestly failed to see this fact as it is, we shall treat and handle this contention as if it were not proved.

It is not because of any obscurity in the text itself, that we must subject ourselves to the Herculean task of proving this date. On the contrary, it is because this palpably plain text has been so befuddled and obfuscated by the perverse and opiniative interpretations of biased commentators that this naturally pellucid time-determination is actually interpreted out of its own skin. The orgy of misinterpretation is so monstrous in its aspect and so enormous in its proportions that no adequate conception of its gravity can be formed without at least a slight attempt at measuring its dimensions.

When we consider that, for the sake of this apparently simple date, hundreds of Lives of Christ, thousands of Gospel Harmonies, and millions of commentaries, sermons and tracts have been written, embodying not only a tremendous load of personal individual learning, but often incorporating a stupendous cargo of predecessors' scientific research, it assumes proportions absolutely appalling. And it is, indeed, of the vastest imaginable importance; not yet, indeed, as many a learned doctor of divinity has imagined, as a ready-made "suitable proof-text" for the correctness of a calendar supposed to have been used in the Nazarene's time, but, when once established and stabilized, as an epoch-marking date of a great era. As we shall soon discover, this date is itself involved in such a labyrinth of scholarly findings that; instead of being serviceable as a formidable proof for the correctness of any calendric conclusion, it is not even ancillary to the line of argument conducted to that end. For, being itself the great date to be proved, it cannot be used as a proof of itself. That would be a colossal begging of the question.

In order to produce just a faint sense of that diminutiveness in the presence of immensity which we feel when we confront the enormous task devolving on anyone who undertakes to undo such a monstrous disorder as the multitudinous datings of the passion and crucifixion of Christ, let us first get an idea of the size of this project.

About a decade ago the *New York Times*, upon inquiry, brought the astounding bit of information that about 350 biographies of Christ have thus far been composed, beside the four biblical gospel sketches, which were the original "Lives of Christ." Since then the number has increased, and is increasing daily.

In its Christmas number of December twenty-fifth, 1937, the *War Cry* of Salvation Army fame brought this amazing statement by Commissioner Wm. A. McIntyre: "It is estimated that some 60,000 books have been written on the life of Jesus Christ."

And if, in his early day, the author of John's Gospel (21:25) feared that "even the world itself could not contain the books that should be written" upon a certain hypothesis, the fact has perhaps literally developed that the land of Israel, the Jewish world, cannot hold all the books and booklets that have already been written.

Now, in order to expose the prodigious lack of faith and want of satisfaction felt by the world at large with any or all of these often masterly efforts of masterful men, we intended to parade a complete column of all the Lives of Christ ever written, together with all the Harmonies and Synopses of the Gospels on which such "lives" are based; but, on second thought, we concluded, first, that the task is too enormous for any one man to undertake, and then, that the work itself would be to no purpose. A thousand more books could be composed on the same plan as in the past and nothing more worth while could be accomplished. So, instead of wearying the student of this weighty subject with a barren array of titles, we shall give a list, and that only partial, of the great men who have given the best of their ability to the solution of this problem.

The registration, in the first place, of Dr. Samuel Farmar Jarvis for a crucifixion date in J. P. 4741 or 28 A. D., is possible only on the supposition that the fifteenth year of Tiberius Caesar began on the nineteenth of August, 27 A. D., and ended on the eighteenth of August, 28 A. D., thus enabling him to go on record as the only advocate of a crucifixion on "Friday, the twenty-sixth of March, 28 A. D." The probability of a date for the crucifixion of Christ is therefore limited to the years 29 to 33 A. D., the former being the fifteenth year of the reign of Tiberius Caesar and the latter the date of Paul's conversion.

DATES FOR THE CRUCIFIXION.

In 28 A. D. Cal. CD

On Friday, March 26th, by S. F. Jarvis.

In 29 A. D. Cal. B

On Thursday, March 17th, by Wm. M. Page, Chas. A. L. Totten, et al.

On Friday, March 18th, by H. Grattan Guinness.

On Friday, March 25th, by Origen, Tertullian, Julius Africanus, Clemens Alexandrinus, Hippolytus, Lactantius, Augustinus, Hieronymus, Sulpitius Severus, Orosius, Victorius Aquitanus, Idatius, Anastasius, Patritius, Clinton, Sepp, Robinson, Zumpt, Young, Benson, Mann, Bianchini, Sanclemente, Ramsey, Sanday, Turner, Tillemont, et al.

On Friday, April 15th, by Ideler, et al.

In 30 A. D. Cal. A

On Thursday, April 6th, by Aldrich, Petri, Sheldon, et al.

On Friday, April 7th, by Bengel, Wieseler, Weiss, Cadman, Schuerer, Friedlieb, Greswell, Tischendorf, Bucher, Ellicott, Thompson, Riggenbach, Lichtenstein, Fouard, Caspari, McClellan, Edersheim, Godet, Goodenow, Priestley, Carpenter, Bradley, Bond, Farrar, Andrews, Lange, Broadus, Kerr, Ylvisaker, Orr, Armstrong, Robertson, Gerhardt, Davis, Fahling et al.

In 31 A. D. Cal. G

On Friday, March 23rd, by Hales, Paulus, Dimbleby, et al.

In 32 A. D. Cal. FE

On Friday, March 28th, by Chron. Paschalis, Eusebius, Anderson, Browne.

In 33 A. D. Cal. D.

On Friday, April 3rd, by Scaliger, Calvisius, Ussher (margin A. V.), Mac-knight, Blair, Renan, Ebrard, Ammer, Ewald, Seyffarth, Shimeall, Thomas, Lloyd, Hayden, Haskell, Williams, Russell, Fotheringham, Pope Pius XI (1933!).

In view of this overwhelming diversity among doctors as here but barely indicated, the question may well obtrude itself: How was it possible for so many able, capable men to work their way to results so much at variance and in contravention with each other? How could such a host of highly educated, learned, god-fearing men yield homage to so evidently fallacious a line of argument as landed them inevitably in contradiction to the results of reasoning arrived at by others? The answer can only be: Not consciously, of course, with fraudulent intent, but solely by involuntary self-deception. The great majority of these able men have fallen victim to the spells of two very seductive sirens. First, the over-estimation of the duration of Jesus Christ's ministry to the extent of one and one half, two and one half, and even three and one half years, and second, the overvaluation of astronomical calculations in the attempt to fix the lunations of the times in total disregard of the calendar then in use, by which the months elapsed and determined the location of feasts automatically. It has been far too generally assumed that the so-called ministry of Jesus extended for years either *before* or *after*, or *both before and after*, the fifteenth year of Tiberius Caesar, and it has been almost universally taken for granted that astronomy could and did determine the real as well as the ideal location of the months and festival days, while a mere reversal of the Sunday letters would suffice to fix the weeks and the week-character of the days. All these fallacious conclusions must be refuted and invalidated before we can hope to reach a definite and decisive result. To accomplish the discomfiture of these two foes to a correct demarcation of the life-time and career of Jesus Christ, we shall first define the period of His ministry and then determine the time of His death and resurrection.

For the purpose of properly staking off the so-called ministry of Jesus Christ, or the active campaign of John the Baptist and

of Jesus and His disciples for the establishment of the kingdom of God on earth, four trenchant dates present themselves—two from the fore and two from the rear.

1.) The date of the adjournment or convocation-day of the Feast of Tabernacles when the senate and people of Bernice in Egypt, in open convention assembled, passed a resolution of thanks to M. Titius, a Roman official, for the marks of civility and accommodation shown them during the convention, on Paophi twenty-fifth, in the fifty-fifth year of some then well-known Augustan Era.

2.) The *forty-sixth* year of building operations around and about the Temple in Jerusalem, begun by Herod the Great and continued up to and after the cleansing of the Temple by the hands of Jesus during the period of His activity.

3.) The conversion of Saul of Tarsus, the persecutor of the young Christian church for some time, but not too long after the stoning of Stephen and the crucifixion of Christ, three years before his first meeting and fraternizing with Peter, and fourteen years before the greater convention of apostles on the question of Circumcision.

4.) The stoning of Stephen, the proto-martyr of the Christian Church, on "the twenty-sixth of December," soon after the killing of Jesus Christ, which he did not hesitate to denounce as a recent act of mob violence.

I.

The *first* date to be selected for its restrictive tendency, in that it firmly fixes the place of the months of the Jewish calendar in such a way that they cannot be dislodged at will and supplanted by either the succeeding or the preceding month, is the "day of the assembly for the Feast of Tabernacles," the twenty-fifth of Paophi, in the fifty-fifth year of some unspecified Augustan Era (see *Mus. Veron.* p. CCCXXV [B. 25]). This date, although displaying the aspect of a rather vague and indefinite time-determination, will be found to contain all the elements of a clear and precise definition of time.

The reason why we welcome this particular date at this time is this: that it connects the Jewish or Syro-Macedonian calendar with both the Egyptian and Julianized Roman calendars at the same time. It will show, not only in what years of the lunar cycle the thirty day intercalations must take place, but also in what lunation, or at what point of the zodiac, they must occur.

This chronological godsend, then, must be translated into terms of calendric and chronographic expression familiar to our ears to be appreciated at its full value. It says in plain Egyptian

phraseology in what year of a certain era, in what month of that particular year, and on what day of that particular month, a certain resolution of thanks to Marcus Titius, the official representative of the Roman government, was passed by an assembly of Jews resident in the city of Berenice in Egypt in appreciation of the courteous and accommodating treatment accorded their convention during the past week of festivity known as the Feast of Tabernacles. Now, when was this? In what year of the Julian Period or the Christian Era was the twenty-fifth of Paophi, or the fifty-fifth day, of the fifty-fifth year of a certain Era of Augustus coincident with the convocation-day, or the last great day of general assembly and adjournment, of the feast of Tabernacles?

"Since we have here," says Dr. Wieseler (*Synopsis*, p. 441, Bohn's ed.), "a Jewish date immediately connected with an Egyptian one, which may be determined independently, we can readily understand the attention that chronologists have always bestowed on this inscription, as yet, however, without due success. . . . Wurm [a German astronomer of note] has subjected the interpretation of Petavius, Vignolles, Hervart, etc., to examination. These chronologists take the month Phaoph mentioned in the inscription for the corresponding month of the VARIABLE year of the Egyptians, and moreover place the commencement of the Alexandrine era of Augustus five years later than is usually assumed, viz. on the first of Thoth = August twenty-ninth, 25 B. C. On these suppositions, Wurm finds this date at harmony with his method. For in 30 A. D., which would then correspond with the fifty-fifth year mentioned in the inscription, the twenty-fifth of the *variable* Phaoph fell on October ninth, and the twenty-second of Tisri also on that day. Wurm, however, clearly saw that the fundamental hypothesis, the correct determination of the year, was untenable, and abandoned this interpretation without substituting any better for it."

"Ideler starts correctly enough with the supposition that by the twenty-fifth of Phaoph we must understand that day of the month of that name of the FIXED Egyptian year which was most intimately connected with the introduction of the Alexandrine era of Augustus, i.e. October twenty-second. 'If the twenty-second of Tisri,' to quote his own words, 'corresponded to the twenty-fifth of Phaoph, the first of Tisri fell on October first of the Julian Calendar.' But since he dates the era of Augustus from August twenty-ninth, 30 B. C., while the fifty-fifth year, or 25 A. D., does not furnish the proper notes of time, according to Wurm the twenty-second of Tisri this year fell on October third, he winds up with the remark, 'the year specified in the inscription must therefore refer to some local era, the epoch of which can scarcely be determined'."

Now the trouble with both of these determinations of the Augustan Era referred to in the Bernicean resolution is this; that they were computed from the wrong point of departure. This point has been wrongly fixed by the assumption that Censorinus, in mentioning the 267th year of the provincial Egyptian or local Alexandrine era of Augustus and the 265th year of the imperial or cosmopolitan era of Augustus, meant to locate the beginning of the Alexandrine *before* instead of AFTER the second of September (the date of the battle of Actium), and that of the world era of Augustus *before* instead of AFTER the first of January, the official date of the era decreed by the senate and people of Rome. In other words, if, instead of placing Censorinus, when he wrote his famous symposium of dates, in the summer of 238 A. D., in close proximity to June twenty-fifth, the initial date of the variable Nabonassan year 986, the scholars mentioned above had rather placed the writer in the fall or at a period subsequent to the beginning of the *fixed* Egyptian year Nab. 986, the results would have been more in accord with the facts of history and more in consonance with the notes of time enregistered in the heavens. Censorinus writes thus: "Of those years which are called Augustan, the 265th, commencing also with the first of January, although the Emperor Caesar, the son of Julius, on the motion of L. Munatius Plancus, received the title of Augustus from the senate and the rest of the citizens on the sixteenth before the kalands of February (January seventeenth) in the year when he, the seventh time, and M. Vipsanius Agrippa, the third, were consuls. But the Egyptians consider this as the 267th of the Augustan years, because they came under the power and dominion of the Roman people TWO YEARS BEFORE." And then, naming the year which both kinds of Augustan years were coordinated, Nab. 986, Censorinus continues: "But the beginning of these years are always taken from the first day of that month which the Egyptians call *Thoth*, and which this year was on the seventh before the kalends of July (June twenty-fifth), whereas, a hundred years ago, when the emperor Antoninus Pius the second time, and Bruttius Praesens, were consuls, the same days were on the twelfth [fourteenth] before the kalends of August (July [nineteenth] twenty-first." And, to continue the course of argument, two hundred and sixty-seven years ago when the Egyptians came, under the power and dominion of the Roman people, these Thoth firsts were four years in succession on the third before the kalends of September (August thirtieth), viz. in B. C. 30, 29, 28, and 27. It is evident, therefore, that, if we want to coordinate all the years mentioned by Censorinus correctly, we must think of him as writing in that season of the year in which the specifically Egyptian Augustan years began. This was the fall or autumn.

So, to prevent a further misunderstanding of these eras, on account of this uncalled for prolepsis of the year, let us correlate these various Augustan years with those of the kingdom of the Greeks, or Seleucidae, the Nabonassan years, and the years of the Julian Period and the Christian Era.

Since Egypt. Aug. 267 = Sel. 550 = Nab. 986 = J. P. 4952 or 238 A. D.,
deducted 267 267 267 267 267

Egypt. Aug. 0 = Sel. 283 = Nab. 719 = 4685 = 29 B. C.

That is to say, 283 years of the kingdom of the Greeks (civil Sel. 283), or 719 years of the era of Nabonassar, or nearly 4685 years of the Julian Period (J. P. 4685 = 29 B. C.) preceded the beginning of the Alexandrine or distinctively Egyptian era of Augustus, as reckoned in this particular provincial era by the inhabitants of that country in which the town of Berenice was located. To obtain the fifty-fifth year of this era, then, it is only necessary to add fifty-five, thus:

55
Egypt. Aug. 0 = Sel. 283 = Nab. 719 = J. P. 4685 — or — 29 B. C.
55 55 55 55

Egypt. Aug. 55 = Sel. 338 = Nab. 774 = J. P. 4740 — or 26 A. D.

And this, again, is to say that, simultaneously with the 774th year of the Nabonassan Era, and almost contemporaneously with the 338th year of the Seleucidae, the fifty-fifth year of Egyptian Augustan years began on Thoth first, which coincided in that year either with the thirtieth of August, J. P. 4739 or 26 A. D., (ending on the twenty-ninth of August, J. P. 4740), if regarded as a firmly FIXED year, or with the seventeenth of August, J. P. 4739 or 26 A. D., and terminating on the sixteenth of August, J. P. 4740, if esteemed vague and variable. In the former case, the fifty-fifth day of the fifty-fifth year of the provincial scale will be Aug. 29 = 241 + 55 = 296 = Oct. 23rd, J. P. 4739 or 26 A. D.; in the latter, Aug. 16 + 228 + 55 = 283 = Oct. 10th, J. P. 4739 or 26 A. D.

In the same manner we are bound to figure the years of the general or catholic Augustan Era, which was introduced upon the official investiture of Caesar Octavianus with the name and title of Augustus. This era had a more general or world-wide imperial application, being more internationally employed than the purely Egyptian era. Coordinated with the most popular, prevalent modes of reckoning, it appears like this:

Aug. 265 = Sel. 550 = Nab. 986 = J. P. 4951 (= 238 A. D.)
Deduct 265 = 265 265 265

Aug. 0 = Sel. 285 = Nab. 721 = J. P. 4686 (= 28 B. C.)

That is to say: 4686 years of the Julian Period preceded the first (or the seventeenth) of January, J. P. 4687 or 27 B. C., when Octavianus was entitled the "Awe-inspiring Ruler of the Roman World," and 721 years of the Nabonassan Era and almost 285 years of the Seleucidae had passed, before the Nabonassan reckoning of Rome's imperial era could begin in Egypt. But it did begin on the old Egyptian New Year's day, on Thoth first, Nab. 772, which, in J. P. 4687 or 27 B. C., synchronized with August thirtieth. To get in touch with the fifty-fifth year of this more cosmopolitan period, add fifty-five years, like this:—

$$\begin{array}{cccc} \text{Aug. } 0 & = \text{Sel. } 285 & = \text{Nab. } 721 & = \text{J. P. } 4686 (=28 \text{ B. C.}) \\ 55 & & 55 & & 55 \end{array}$$

$$\text{Aug. } 55 = \text{Sel. } 340 = \text{Nab. } 776 = \text{J. P. } 4741 (=28 \text{ A. D.})$$

Expressed in so many words, this means that the fifty-fifth year of the catholic era of Augustus began on the first or seventeenth of January, J. P. 4741 or 28 A. D., in the strictest interpretation of the count, but could be regarded as beginning (in Egypt) on the first of Thoth, 776 Nab. vague or invariable, on the sixteenth or the thirtieth of August, as the chronicler or chronologist might choose. In accordance with these beginnings the twenty-fifth of Paophi, being the fifty-fifth day of the year Nab. 776, could be: either the (Aug. 15 = 227 + 55 =) 282nd day of the year, i.e. October ninth, J. P. 4741 or 28 A. D., or the (Aug. 29 = 241 + 55 =) 296th day, i.e. October twenty-third, 28 A. D.

These are the four modes of computing and defining the eras of Augustus, of which possibly any one may, but positively only one can, be really intended by the indefinite allusion of the Bernicean resolution. It must refer to the epoch of Roman domination in Egypt, but to which of these four alternatives does the fifty-fifth year of the act refer?

The specifically Egyptian Augustan Era, as Censorinus calls it, which in June, 238 A. D., began its 267th current year, must have begun its course on August thirtieth, 29 B. C.; for the New Year's days of the Nabonassan era, when reversed from the twenty-fifth of June, 238 A. D., to the first year of the provincial or local Alexandrine era, reverts to its second prolepsis out of four successive times, to the thirtieth of August in B. C. 30, 29, 28, and 27. The first time the first of Thoth falls back to the thirtieth of August is in the year J. P. 4684 or 30 B. C., when its first prolepsis to that date takes place three days PRIOR to the battle at Actium, consequently just a trice too previous to be the starting-point of an era of Augustus. But the second prolepsis in this block of four marks very properly the beginning of a new era. Occurring, as it did, on the thirtieth of August, both *after* the battle of Actium on the second of September, 30 B. C., and

AFTER the occupation of Alexandria on the twenty-seventh of March, 29 B. C., it indisputably ushered in the first Nabonassan New Year's day as the inauguration-day of a new "golden epoch" for Egypt on the first of Thoth, Nab. 720. For while it is true that the *Astronomical Canon* ascribes the Nabonassan year 719 to Augustus as the virtual as well as prospective first Roman ruler over Egypt, it is also true that the last actual ruler of the Greek dynasty of Ptolemaeans, Cleopatra III, ended her life and therewithal her queenly rule as late as the fourth of the kalends of September, or August twenty-ninth, 29 B. C., which was then the "last day" of the Nabonassan year 719 and therefore the grand finale of Greek or Macedonian dominion in Egypt. It was, however, at the same time the first great day of practical accession to Egyptian royalty and rulership, for on the same "last day" of Nab. 719 fell the first great day of Augustan glory and god-like supremacy. The morrowing Thoth first, therefore, literally and actually introduced the era which the loyal class of Egyptians delighted to call their "Augustan Era," while the masses of the people ignored the stabilization of their vague Egyptian year by the application of the bissextile ruling as arranged and ordered by their Roman master. The first mode of reckoning, at once captivating the imagination by its proletarian simplicity and the sympathetic evolution of events, bids fair by its very naturalness to capture the judgment and prejudice of the chronologist and historian. The second mode of reckoning, starting from the same point and stabilized as beginning on the thirtieth of August, failed to win public favor as evidenced by the popular disregard of calendar regulations and the consequent continuance in vogue of the vague Egyptian Nabonassan year. If, then, we computed the number of days from the tenth or the twenty-third of October, 26 A. D., the first two correspondents to the twenty-fifth of Paophi, in the fifty-fifth year of the unspecified Augustan Era, to the sixth of August, 70 A. D., the ultimate end of the Jewish-Roman or Asmonean-Herodian Era, and deducted the amount from the total number of days contained in this era (85330 days), we should obtain the specific days in this great series which corresponded to the twenty-fifth of Paophi and the tenth or the twenty-third of October, 26 A. D., respectively. But that would necessitate a separate calculation for each alternative. So, instead of splitting and separating our efforts, we shall calculate all four of the alternatives at once by the method employed throughout this work.

Computing the number of days in the latter part of the Jewish-Roman era, from the beginning of Sel. 338, the Jewish year in which the first alternative corresponding to the date of the Berenicean document is located, to the end of the Asmonean-Herodian era in Sel. 382, and deducting this amount from the

aggregate of days contained in the years 26 A. D. to 70 A. D., from the first of January, 26 A. D., to the sixth of August, 70 A. D., we shall be in possession of the equation which will enable us to proceed from year to year.

14.	Cal. Per. V ³	Sel. 338	=	384 d.
15.	Cal. Per. V ³	Sel. 339	=	354 d.
16.	Cal. Per. V ³	Sel. 340	=	384 d.
17.	Cal. Per. V ³	Sel. 341	=	354 d.
18.	Cal. Per. V ³	Sel. 342	=	354 d.
19.	Cal. Per. V ³	Sel. 343	=	384 d.
1-19	Cal. Per. V ⁴	Sel. 344-362	=	6940 d.
1-19	Cal. Per. VI ¹	Sel. 363-381	=	6940 d.
1.	Cal. Per. VI ²	Sel. 382	=	128 d.

16222 d.

Deducting this number of days comprised in the balance of the Jewish-Roman era from the sum total, $85330 - 16222 =$ we find that the days in the era preceding the point from which we are reckoning amounted to 69108.

Computing the corresponding period in Roman chronology by rule of the Julian calendar, i.e. $A. D. 69 - 25 = 44$ years, and a fraction of a year in 70 A. D.,

$$\begin{array}{r}
 365 \times 44 \\
 \hline
 1460 \\
 1460 \\
 \hline
 16060 \\
 \quad 11 \text{ leap year days} \\
 \quad 218 \text{ days in 70 A. D.} \\
 \hline
 16289 \text{ days.}
 \end{array}$$

If now, we deduct the 16222 days according to the Jewish calendar from the 16289 days according to the Julian calendar, we obtain the balancing statement that the 69108th day of the Asmonean-Herodian Era equated with the sixty-seventh day of the Julianized Roman calendar, which, being the eighth of March, 26 A. D., corresponded to the twenty-ninth of Adar, Sel. 337. From this equation we may now figure out the relation of the Feast of Tabernacles to the four possible definitions of the twenty-fifth of Paophi in the fifty-fifth year of the Augustan era. Counting the number of days in the proleptic or sacred Seleucic year to have been 177 in the first half with fifteen and twenty-two to be added for the dates of the feast in the month Tisri, we find the Feast of Tabernacles to have begun on the 192nd day, and to have ended on the 199th day, of the sacred Jewish year, when this year was a common or ordinary one, but the 222nd and the 229th respectively, when it was complemented by the insertion of a regular embolismic month. The calculation of the various forms of the Augustan fifty-fifth year follows:

[illegible]

One casual look at this display of ordinary arithmetic is sufficient to enable any one to perceive that, in the case of the imperial era of Augustan years, the feast of Tabernacles comes too late to be brought into contact with the twenty-fifth of Paophi, whether that be figured out in variable or vague Nabonassan years or in fixed or stablized, Julianized Egyptian years, for in neither case does the *last*, the great day of the feast, Tisri twenty-second, come near the twenty-fifth of Paophi, which fell respectively on the ninth or the twenty-third of October, J. P. 4741 or 28 A. D. In the former case, however, the historic instance of the Berenicean Feast of Tabernacles, the whole holiday season occurs just as it should do to fulfill the requirements of the case, the last day, Tisri twenty-second, coinciding with splendid precision with the twenty-third of October, 26 A. D., and therefore, with the twenty-fifth of Paophi in the fifty-fifth year of the Alexandrian Era of Augustus. The only astonishing thing about the result obtained is this, that the date of the document of Berenice was composed, not in terms of the proletarian, provincial form of the era, (as might have been expected), but in the phrase and figures of the standardized stabilized or fixed form of the Julianized year. But, having complied with the postulate expressed in the words of the inscription, and supplied to perfection the proof that the fixed form of the specifically Egyptian Augustan years is meant, we may now inquire, What use is there to be made of the fact that the twenty-second day of Tisri or Hyperberetaeus, Sel. 338, fell on the twenty-fifth of Paophi, 55 Aug. E., and the twenty-third of October, J. P. 4739 or 26 A.D.?

The use we want to make of this conclusion is briefly this. The date we have just established is a time-determinant of the Jewish calendar of a strictly historic character. It is not a hypothetic, supposititious guess or conjecture, and therefore the meretricious product of a mere wish. As a real, authentic date of history proves beyond cavil that the chronological site of the Jewish calendar months cannot be moved at will, being held fast and immovable by two major forms of time-determination, the Egyptian and the Roman systems of time-keeping. By the triple allocation of the Feast of Tabernacles convocation-day on the twenty-second of Tisri or Hyperberetaeus (Sel. 338), on the twenty-fifth of Paophi (55 Aug. E.), and on the twenty-third of October, 26 A.D., not only the seventh month of the sacred Jewish year is proved to have tallied with the month of October from its second to its thirty-first day, but the ninth month was coetaneous with the thirtieth of November and the month of December from its first day to its twenty-ninth. Moreover, the twelfth month being contemporaneous with the Roman month *March*, the first month of the sacred Jewish year is shown to have

squared in the main with *April*. This first month Nisan or Xanthicus, bearing in its bosom the all-important feast of the Passover, extended in 27 A. D., the year after the resolution of Berenice, from March twenty-seventh to April twenty-fifth, in consequence of the fact that, late in the summer or early in the fall of 26 A. D., there had been an intercalation of thirty days in the Jewish calendar, this having been the fourteenth year of the third nineteen-year cycle of the Vth Calippic Period. Two years after the Berenicean resolution, at the same time of the year 28 A. D., because the current Jewish Seleucic year 340 was the sixteenth year of the same nineteen-year lunar cycle, another regular intercalation of thirty days took place, compelling the late emplacement of Tisri in October, Casleu in December, Adar in March, and the following Nisan in the month of April. From these historic allocations, as borne out by monumental and documental evidence, there can be no appeal. Much as we may admire the labor of love of such men as Wm. M. Page, and may desire to agree with such men as Chas. A. L. Totten, we cannot convene with them in the unhistorical emplacement of the crucifixion Passover in March, 29 A. D. We must put it down as an unassailable, incontestable fact that the feast of Tabernacles "in the fifteenth year of the reign of Tiberius Caesar" was due to be celebrated in October, Dedication in December, and the following feast of the Passover in April, whatever may be the significance of this arrangement. Suffice it for the present to establish this fact as fixing immutably the months in the ministry of Jesus Christ. As to the year of the ministry itself, we will now proceed to the second argument.

II.

The *second* datum to be used in determination of the Ministry of Jesus Christ is the forty-sixth year of temple construction years, designated by the acting authorities of the temple service as the extreme extent of building operations. As a counter thrust to the challenge of Jesus: "Destroy this temple, and *in three DAYS* I will raise it up," the Jews replied with emphasis on the length of time, "*Forty and six years* was this temple in building, and wilt thou rear it up *in three days*." The extremes being thus forcefully expressed, the maximum vs. the minimum, it is clear that, while the minimum may be reduced to "less than three days," the maximum may not be increased to "more than forty-six years." The Jews having already aggrandized, if not exaggerated the amount of time expended on the building, it was not probable that its duration would exceed "*forty and six years*." It is therefore to be expected that this construction period, so

emphatically stated, will mark off the bounds of the Messianic ministry with such nicety as well as certitude that there can be no question as to its historical reality.

So before we begin to define the ultimate reach of this construction period, let us ask, When did the building of the Herodian temple begin? We have ascertained before this (in Vol. III, Ch. VIII) that the consecration of the sanctum of the new temple took place on the eighth of December, J. P. 4697 or 17 B. C., the regular (Maccabean) dedication-day of the year Sel. 296 having coincided with the anniversary of Herod's coronation, as Josephus, the historian of Herod's reign, reports, "*in a year and six months*" from the time when the work of construction began in the eighteenth year of his reign. This minute specification of time enables us almost to name the day on which the corner-stone was laid. "*One year and six months*," if reckoned in full, would take us back to the spring of J. P. 4696 or 18 B. C., or, to be more precise, to the month of Daesius or Sivan, in which the feast of Pentecost constitutionally occurred. The demarkation of the initial period, in fact, is so close that we may just as well denominate the Feast of Pentecost, on the seventh of June, 18 B. C., or the day thereafter, the very day of the beginning. If, then, from the Feast of Pentecost, J. P. 4696 or 18 B. C., we begin to enroll the forty-six years of temple construction, the forty-sixth year of building operations will commence in the spring of J. P. 4741 or 28 A. D., and end in the spring of J. P. 4742 or 29 A. D., carrying in its bosom the Passover to be defined exactly fifty days before its own termination, which was in the year the Pentecost was fully come (Acts 2:1), the seventh of June, J. P. 4742 or 29 A. D.

Now it need not be argued whether the Passover of the forty-sixth year of temple building was the first, second, third, or fourth Passover feast of the ministry of Jesus: it goes without saying that it was the Passover at which Jesus cleared out the temple and challenged the priests and elders to do their worst. The series of temple construction years, if consistently carried out, lands the forty-sixth year, and with it the Passover of expurgation and of expiation in the lap of J. P. 4742 or 29 A. D., and this is, as we have abundantly shown, the second half of the fifteenth year of Tiberius Caesar, or, as we have also shown, the consulate of the Gemini, Rubellius and Fufius. This, therefore, settles the primary question whether the ministry of Jesus was of three and one half, two and one half, or one and one half, or of only one half year's duration. It restricts the second half of Jesus' activity and passion to the second half of Tiberius' fifteenth year of empire, just as the commencement of Jesus' ministry was confined to the first half of Tiberius Caesar's fifteenth year. The two halves being thus defined, and both confined in half a year, we might rest

herewith content, but we shall super-add an argument or two to bolster up the result so far attained.

III.

The *third* date to be considered with a view to defining the duration of Christ's ministry by its means is that of the time when Saul of Tarsus, the later apostle Paul, was converted to the Christian faith. Between the death of Jesus Christ and the rebirth of this man there intervenes a period of time which is often most arbitrarily rendered long or cut short as the case might be, being protracted or retrenched to suit the fancy or theory of each would-be chronologist or historian. This specific period may be divided into two very unequal parts, the one preceding the stoning of Stephen (Acts 7:59) and the other succeeding it. It is generally at the expense of the latter that the ministry of Jesus is enlarged and prolonged, though it is also at a loss to the conversion period of St. Paul that the ministry of Jesus is sometimes long drawn out. Thus, if, for instance, as by archbishop Ussher (see margin *King James' version*), the conversion of Paul is placed in the year 35 A. D., the desire to extend the career of Jesus to as late a day as April 3rd, 33 A. D., reduces the period of Saul's persecution of the church to a little more than two years, a period rather short to provoke the self-reproach of Gal. 1:13: "Ye have heard of my conversation in time past in the Jews' religion, how that *beyond measure* I persecuted the church of God." If, on the other hand, the conversion of Saul is assigned to as late a date as 37 or 38 A. D., as is done by Dr. Smith in his Dictionary of the Bible, (Art. *Paul*), and the death of Stephen is assigned to the year 30 A. D., a period of persecution is created which is unconscionably too long, a long, long, overlong period of seven or eight years! So, when a season of zeal run wild is subject to such extremes of interpretation, what may we expect of it as a chronological metron to be used as a means of correcting and setting right the proper boundaries of another period equally subjected to the caprice of the chronologist? What data have we as to the time when the conversion of Saul put a stop to his career as a persecutor of the church and turned him into the great protagonist of the faith that he is considered today.

The psychological upheaval known as St. Paul's conversion, which transformed a persecutor of Christians into a protagonist of Christianity, occurred, as he himself tells us (Gal. I. 18), some "three years" before his first coming back to Jerusalem. This indication of time seems simple and significant enough. But the opinions of the learned are notwithstanding this fact very much divided and as widely divergent from the truth as they are from

each other. Thus, placing the crucifixion of Jesus in 29 A. D., Prof. Totten assigns the mob-murder of Stephen to Ab ninth, 29 A. D. and the conversion of Saul of Tarsus to Pentecost in the next year, 30 A. D. Petavius ascribes this change in Saul to 33 A. D., Tillemont to 34, Ussher to 35, Lewin to 37, Eichhorn to 38, and Wieseler to 40 A. D. None of these scholars (except Lewin) place both the death of Stephen and the re-birth of Paul in the same year; two of them, Petavius and Ussher, prolong the pernicious activity of Saul to a year and a month; the rest, Eichhorn and Wieseler, curtail his breathing out threatenings and slaughter to a month. Thus, it would seem at first blush, as if it were an utterly hopeless task to fix the time when Saul succumbed to his change of heart. Nevertheless, if we are willing to accept the traditional twenty-fifth of January as the probable date of Paul's conversion, and to assume that the "*three days*" in which he was without sight, contained a Sabbath or Saturday, we may determine which of the five or six years from 30 A. D. to 36 A. D. witnessed the marvellous change of Saul of Tarsus into Paul the apostle of Jesus Christ to the Gentiles.

We have, for the first of these presuppositions, indeed, only the authority of ecclesiastical tradition, and that not of the most satisfactory kind. Even the Catholic Encyclopedia (art. *Paul*) has no better information to give than this: "The feast of the Conversion of St. Paul (January twenty-fifth) is of comparatively recent origin. There is reason for believing that the day was first observed to mark the translation of the relics of St. Paul at Rome, for so it appears in the *Hieronymian Martyrology*."

But why, we may ask, was this particular day selected for the translation of the relics unless it was for the reason that it possessed reminiscent qualities such as an anniversary, for instance, holds inherent in its very fabric? Why has no other date been recommended but this, the twenty-fifth of January? We do not mean to imply that, at any other season of the year, conditions of weather and temperature, climatic changes and excesses would have made such a journey as that of Saul to Damascus impossible. But we do mean to insist that the winter rather than the summer is the season for travel in Syria. From the beginning to the end of the Asmonean-Herodian Era (not to mention the preference of modern tourists for this season), the vast majority of travel cases mentioned in that part of Jewish history occurred shortly before and after the winter solstice. From the expeditions of Antiochus Epiphanes into Egypt down to the forced marches of Titus out of Egypt into Judea, which resulted in the destruction of Jerusalem, we might include in our list of winter wayfarings at least the following six or seven examples. Epiphanes "removing out of Egypt in a furious mind,

took the city by force of arms" (II Macc. V. II) near the *winter* solstice of 168 B. C. Pompey the Great, being exceedingly angry at the behaviour of Aristobulus, made an expedition against him, marching upon Jerusalem by way of the Jordan ghor and Jericho in the early winter months of 63 B. C. (Jos. *Ant.* B. XIV. C. III. §4) Herod, the Idumean upstart, "being neither affrighted at the height of the storm [Euroclydon] which then happened, nor at the tumults that were now in Italy," "he went to Rome with great speed" (Jos. *Wars* B. I. C. XIV. §2, 3.), where he was, indeed, appointed king of the Jews in January 39 B. C. Joseph, the foster-father of Jesus, "also went up from Galilee, out of the city of Nazareth, into Judea, unto the city of David, which is called Bethlehem; (because he was of the house and lineage of David:) to be taxed with Mary his espoused wife, being great with child. And so it was, that, while they were there, the days were accomplished that she should be delivered" (Luke II. 4-6) in the depth of winter, at Christmas-tide, J. P. 4709 or 5 B. C. Jesus Himself, when "it was at Jerusalem the feast of the dedication," set His face steadfastly to go to Jerusalem again, though the Jews of late had sought to stone him, "*and it was winter*" (cf. John XI. 7. 8 and X. 22). And Vespasian, already "excited to go on briskly with the war (Jos., *Wars*, B. IV. C. VIII. §1), "himself made haste to go to Rome, as the *winter* was now almost over, and soon set the affairs of Alexandria in order," while he "sent his son Titus, with a select part of his army, to destroy Jerusalem." (*Wars* B. IV. C. XI. §5) So Saul of Tarsus, "yet breathing out threatenings and slaughter against the disciples of the Lord," journeyed even in the winter season to Damascus, "a blasphemer, and a persecutor, and injurious." And if we may assume that he consented to the death of Stephen in the winter, chiefly because the feast of the dedication of the Temple fell in the winter time, may we not take for granted that his conversion occurred in the winter month chiefly because the twenty-fifth of January occurs so shortly after the feast of dedication? And if it was only natural that a notorious act of fanaticism should emanate from a *place* notorious for its religious frenzy, is it not equally natural that it should originate at a *TIME* when enthusiasm is at its highest? Such a *time* or chronological hot-bed of fanaticism was the week of almost idolatrous devotion dedicated to the Temple and its worship at the feast of the Dedication. It would be just like him if he went soon after a feast of "temple worship" (rather than worship in the temple), possibly soon after the stoning of Stephen on the twenty-sixth of December not so long ago, to the exalted temple authorities to get for himself a commission for the stricter enforcement of the law. Being himself "circumcised the eighth day, of the stock of Israel, of the tribe of Benjamin, an Hebrew

of the Hebrews; as touching the law, a Pharisee," he might have been accounted a competent judge of Jewish orthodoxy, and as such entitled to formulate and enforce the standard of living that all good Jews should be expected to come up to: "Concerning zeal, persecuting the church; touching the righteousness which is in the law, blameless." We shall take, for granted then, (in default of a better, if there be such) that the traditional date for the conversion of Paul (January twenty-fifth) is as good and serviceable as can be desired.

In fact, we may almost claim the authority of Holy Writ for the authenticity of this date, if we may stress a certain concomitant circumstance at the time of his being without sight as a true determinant of that time. If we may assume, on the strength of his own assertion (Phil. III. 6), that Saul had been, "as touching the righteousness which is in the law, blameless," that is, beyond reproach in the matter of public ceremony and ritual custom, and therefore addicted to the display of praying and fasting, etcetera, then we may conclude that he was found by Ananias, as informed, in the act of "praying" *on the Sabbath day*. We know from other sources (like Acts XVI. 13) that Paul in company with Silas went out of the city of Philippi, for instance, by a riverside, where prayer was wont to be made, not every day, but certainly "*on the Sabbath day*." May we not, then, conclude that one of the "*three days*" after Paul's conversion, in this case, the twenty-sixth or twenty-seventh of January, was a Sabbath? And does it not seem more plausible to suppose that the second day of his blindness was the Sabbath, and that he simply continued in prayer on the third day, than that he was found "praying" only on the third day, and then only because it was a Sabbath? Now this characterization of one of the three days as a Sabbath has the sanction of at least one eminent chronologist and commentator, Prof. Totten. We incline most decidedly in favor of the sabbatization of the second day because we believe Saul of Tarsus so timed his five to six day journey that he arrived in the vicinity of Damascus on the afternoon of Friday or the evening of the Sabbath-day. If, then, we may conjecture this to have been a fact, we have in this circumstance sufficient evidence that the traditional date for Saul's conversion, January twenty-fifth, is more than a mere tradition, particularly so if the dominical lettering of the year sustains our interpretation. We shall therefore set down their order consistently with their established sequence.

The Sunday letter of 70 A. D. having been shown to have been B and that of 165 B. C. the letter G, the correct designation of the debateable years will be: 30C, 31BA, **32G**, **33F**, 34E, and 35DC. Looking up the twenty-fifth to twenty-seventh of January

in any old set of almanacs so designated, we shall find them denominated as follows:

30 A. D., Cal. C,	<i>Jan. 25th,</i> Monday,	<i>Jan. 26th,</i> Tuesday,	<i>Jan. 27th.</i> Wednesday.
31 A. D., Cal. BA,	Tuesday,	Wednesday,	Thursday.
32 A. D., Cal. G,	Thursday,	Friday,	Saturday.
33 A. D., Cal. F,	Friday,	Saturday,	Sunday.
34 A. D., Cal. E,	Saturday,	Sunday,	Monday.
35 A. D., Cal. DC,	Sunday,	Monday,	Tuesday.

It will require no particular keen insight to observe that the only brace of years which will at all comply with the calendric requirements of this date according to this norm, is the middle pair of twelvemonths, J. P. 4745 and 4746 or 32 and 33 B. C. The former, 32 A. D., having a Sabbath on January twenty-seventh as the third day, the latter a Saturday on the twenty-sixth of January as the second day, both would seem available. There is, however, **this difference**, that, while the former creates a supernumerary count (four years instead of three) from his conversion to his first conclave, and besides lacks the prestige of selection by any chronologer of note as the year of Saul's metamorphosis, the latter conserves the exact count of *three years* from his first change to his first meeting with any apostle and besides boasts of the choice of so eminent a chronographer as Petavius as the true and actual date of Saul's change of heart and creed. We therefore agree with Petavius and heartily endorse the twenty-fifth of January, 33 A. D., as the date most compatible with the requirements and postulates of the narrative of Saul's conversion, and most perfectly in line with the date of Paul's stay with Peter "fifteen days," from Saturday, March twenty-fifth to Saturday, April ninth, 36 A. D. The date of the former thus helps to fix and settle the date of the latter, as required by the "*three years*" of Gal. I. 18.

But if the transmutation of Saul into Paul occurred on the twenty-fifth of January, 33 A. D., as claimed by Petavius, it is obvious that the crucifixion of Jesus could not have occurred in the *same* year, sixty-eight days *later*, on the third of April, 33 A. D. Being borne out by as perfect a calendric agreement as any well-authenticated date can have, the traditional date for Paul's conversion precludes the possibility of a crucifixion of Jesus in J. P. 4746 or 33 A. D. Notwithstanding the high recommendation of this nineteenth year of Tiberius Caesar as the death-year of Jesus by such eminent scholars as Scaliger, Calvisius, Ussher, Macknight, Blair, Renan, Ebrard, Seyffarth, Russell, et. al., and, as late as January sixth, 1933, by his Holiness, Pope Pius XI. (who, though admitting that "the precise year of this event has not been historically ascertained," decreed, in the Papal Bull

Quod Nuper, the year 1933 "to be an extraordinary holy year and a general and highest jubilee at the close of the nineteenth century from the accomplishment of the redemption of mankind," it just simply cannot be. The crucifixion, therefore, must have been, under all circumstances, BEFORE the year 33, (which is herewith definitely eliminated), but how much sooner, whether in 32, 31, or 30 A. D., cannot be determined without another limitation of the period of persecution to which Saul of Tarsus subjected the infant Christian church. This *anterior* limitation of the period is the date of the martyrdom of Stephen, BEFORE which the crucifixion of Jesus must necessarily have taken place. Most commentators and chronologists unite in placing the crucifixion of Jesus and the stoning of Stephen in the same year, but whether in so agreeing, they are justified, will appear from the following consideration of the latter date.

IV.

The fourth and final argument available for the hedging in of the so-called ministry of Jesus Christ is the proto-martyrdom of Stephen, the deacon of the primitive church at Jerusalem. This primeval event constitutes a second, almost pivotal date for the absolutely certain fixation of the crucifixion and with it the original Easter of Christian chronology.

This event, so vital to the true emplacement of the crucifixion and the resurrection, is variously assigned to years ranging from 29 to 39 A. D. thus, by Totten to 29, by Petavius to 31, by Ussher to 33, by Lewin, Basnage, and Eichhorn to 37, and by Wieseler to 39. We have, however, eliminated all dates subsequent to 36 A. D. by virtue of the first convention of apostolic princes in 36 A. D., and, by the same token, the three years of Paul's retirement into Arabia prior to this year. The only possibilities discoverable in the range of facts and figures must be sought in the interim between 29 and 32 A. D.

Even in this narrow compass it will be found advisable to study well the calendric conditions and requirements of the case before deciding in favor of any one year in particular, for we are determined to accept only the true. Hence, in order to envisage the actual conditions of the times, so as to enable us to compare them with the specifications of history or quasi-historical tradition, we shall execute another little series of calculations, showing the relative distance of the feast of Lights or Dedication from the ecclesiastical Julian date for the martyrdom of St. Stephen on the twenty-sixth of December. The reason for the proposed comparison is this:

As the story of Stephen's martyrdom in the light of a pictorial description would be considered an epic failure if the background of the holy precincts with the Temple in the center were omitted, so the narrative, regarded as a chronicle or historical document must be regarded a chronological failure if the prominence given the Temple in his harangue and the proximity of the traditional date (December twenty-sixth) to the Jewish memorial season (Casleu twenty-fifth to Tebeth first) were not perceived to be plain references to the Feast of Dedication. Being ordained and set apart for the express purpose of commemorating and magnifying the dedication of the Temple, it was only natural and human that their elation over the Temple should run amuck and vent itself in violent demonstration. And as the burning Sabbath question became invariably the bone of contention on every ordinary and extraordinary instance of Sabbath-day observance upon the slightest provocation, so the question about holy *places* was given special prominence on the anniversary and memorial days devoted to their cult. In this case, the cultivation of localism in religion was particularly pronounced during the Feast of Lights or Dedication. It actually amounted to a form of idolatry of which the Temple was the object of worship. This fetichism was the sin which had aroused the martyr-spirit of Stephen, and, like a primitive prophet, he was not backward about denouncing the abuse of the holy house on the very door-sill of the Temple. Like his Master, he had dared to speak "blasphemous words" against the Temple. To the Jews, always inveterate and unmitigated literalists, ever opposed to the spirit of a thing, the innuendo against their pet diversion was a crime. As in regard to circumcision and Sabbath-observance (see Acts 21:21), so in regard to temple-worship, these obstinate and stubborn externalists went the limit of misunderstanding and misinterpreting every attempt at spiritualizing the barren features of their religion. That, in this case, the earthly localism in religion was the butt of his rebuke to the Jews is evident from the point his speech leads up to. And this culmination of Stephen's speech leads us to another deduction. As the subject of St. Stephen's philippic requires a localistic foil to give it its proper sting, so the traditional date of Stephen's martyrdom demands a background of sufficient chronological importance to give its peculiar pith and pathos.

As, not so long before, the Master Himself "went into the synagogue on the sabbath-day, as His custom was" (Luke 4:16), "and taught them on the sabbath-days" (v. 31); and as his great successor, Paul, not many years afterwards, "as his manner was, went in unto them, and *three sabbath days* reasoned with them out of the scriptures" (Acts 17:2), so the protomartyr of the Christian church seems to have cultivated the same custom of arguing and

disputing with certain frequenters of the synagogue on *sabbath days*. This circumstance granted, that the final dispute of Stephen with his opponents occurred on a *Sabbath*, we may even surmise that this final and fatal *Sabbath-day* was the concluding Sabbath-day of the Dedication festival week, which began with the twenty-fifth of Casleu and terminated with the first of Tebeth: hence, that the death-day of Stephen, either a holiday-sabbath or a regular week-day sabbath, OR BOTH, fell on "the last day, the great day" (John 7:37) of the feast. For the case was this.

If there was any protracted period in the liturgical calendar of the Jews during which the apostles would be "DAILY in the temple" (Acts 5:42), and during which the outstanding subject of discussion would be the temple and the temple-service (customs of Moses, Acts 6:14), this period of DAILY services was the seven-day feast of the Dedication. Instituted for the purpose of hallowing this "place" of worship, it was considered immune even from the touch of friendly and well-meant criticism, and absolutely exempt from the attacks of hostile and destructive disparagement. In the case of Stephen, full of faith and of the Holy Ghost, and aggressive to the point of challenging and provoking debate, his manner of procedure was as direct and undisguised as the Lord's own dealing with the Pharisees (Luke 7:36-50). At no time of the ritual year or the holiday season would the infatuated Jews be so sensitive to the least disparaging remark about the temple as then when the welkin rang daily and all day long with the praises of the temple. No time, therefore, appears more appropriate and more inherently probable for the martyrdom of Stephen than the day indicated by the martyrologies.

Inferring, then, from the nearness of the traditional Julian date for Stephen's martyrdom (December twenty-sixth) and from the apparent customs and conventions of the day, that the stoning of Stephen actually occurred in that year of the period preceding the conversion of Paul, but situate in the sequence to the Crucifixion, in which the two tentative dates (respectively of the Jewish and the Julian calendar) shall be found to coincide, we shall now proceed to look for this consummately decisive calendrical coincidence. Since the years thus described as eligible for the martyrdom of Stephen can be only the fifteenth to nineteenth years of Tiberius, or the years of grace 29 to 32 A D., the simplest way of obtaining the equation of the two calendars will be, first, to compute the number of days in the Jewish-Roman era from the beginning to the end of the third nineteen-year lunar cycle of the Vth Calippic Period, or the number of days in the remaining two nineteen-year cycles and the fraction of a year in 70 A. D., and, then, deducting the amounts from the sum total

(85,330 days). Or, adopting the equation arrived at in the calculation of the twenty-fifth of Paophi, 55 Aug. Era, to wit, that the 70230th day of the Asmonean-Herodian Era is equivalent to the ninety-third day of the Julian year J. P. 4742 or 29 A. D., or, in other words, that the last day of the Jewish or Syro-Macedonian year Sel. 340, which is the sixteenth year of the third nineteen-year cycle of the Vth Calippic Period, is coeval with the ninety-third day of J. P. 4742 or 29 A. D., we may go on building up the progression of time according to the Jewish calendar employed at the time. With this process approved, all we shall have to do to obtain the nearest approach of the post-dedication sabbath in the Jewish almanack to the 360th day; viz. the twenty-sixth of December, in the Roman Julianized calendar, will be to add 267 days ($177+30+29+25+6=$) 267 days to the serial number marking the close of each successive Syro-Macedonian year. When this has been done, we shall be in a position to tell whether this tentative approximation possesses the substance of truth or not. The equation of Jewish and Julian time having been quoted as 70230.93d. in 29 A. D. the computation of the years 29 to 32 A. D. will appear like this:

	<i>Jewish vs.</i>	<i>Julian.</i>	
70230	70230	93 d. in 29 A. D.	93
267 17) Sel. 341 =	354	354 d. in Sel. 341	267
7)70497			D
10071 + 0		447	360 =
		-365 d. in 29 A. D.	Sat., Dec. 26, 29 A.D.
70584	70584 ..	82 d. in 30 A. D.	82
267 18) Sel. 342 =	354	354 d. in Sel. 342	267
7)70851			C
		436	349 =
		-365 d. in 30 A. D.	Wed., Dec. 15, 30 A.D.
10121 + 4		71 d. in 31 A. D.	71
70938	70938 ..	177	30
30	177	30	267
267 19) Sel. 343 = {	30	177	
7)71235	177		368 =
		455	G Tues., Jan. 2, 31 A.D.
		-366 d. in 31 A. D.	
10176 + 3			
71322	71322 ..		
1		89 d. in 32 A. D.	89
267			G
7)71590			1
			267
			357 =
10227 + 1			Sun., Dec. 23, 32 A.D.

Dedication Festival.

Casleu 25 = Sun., Dec. 20th to **Tebeth 1** = Sat., Dec. 26th, 29 A. D.
 Casleu 25 = Thurs., Dec. 9th to **Tebeth 1** = Wed., Dec. 15th, 30 A. D.
 Casleu 25 = Wed., Dec. 27th to **Tebeth 1** = Tues., Jan. 2nd, 32 A. D.
 Casleu 25 = Mon., Dec. 17th to **Tebeth 1** = Sun., Dec. 23rd, 32 A. D.

Accordingly we have before us four possibilities for the dating of St. Stephen's martyrdom, *before* which the crucifixion of Christ must have happened, and *after* which the conversion of Paul must have followed in due time, if we suppose Stephen to have been stoned on a twenty-sixth of December, but only one possible and plausible case if we suppose this tragedy to have happened on the last day of the Dedication festival. If we concede any chronological value to the remarkable coincidence claimed for the traditional date of the martyr's death, the only year which can make good such a claim is the first of the four years in question, not 32, not 31, not 30, but solely and exclusively 29 A. D. It is the year nearest to the crucifixion of Christ, in fact, the year which encloses and includes both martyrologic events. Indeed it is the only year which can be identified (because it is the same) with the only year which can have witnessed the preaching campaign and passion of Jesus. The identity of the year of the martyrdom of Stephen with the year of the self-immolation of Jesus is almost universally acknowledged. No one who carefully and candidly peruses the Acts of the Apostles (chap. 1 to 7 inclusive) can come to any other conclusion than that these seven first chapters narrate the events of the first year of the Christian Church, the same year as that in which the Lord and Master of the Church was slain, and the same year in which the solemn charge of having betrayed and murdered the Just One would be most cutting to the consciences of the Jewish councillors and their accomplices. So, whether the proper data for the fixation of this primeval event have been reported in so many express phrases or not, the fact is, that they are borne out by the calendar, and the calendar cannot here be changed. If then, on the head of the other calculations of dates before and after this event, we find that the circumstances as surmised and suggested agree with the calendric conditions of the year, we may conclude with safety and assurance that they were historical and actual matters of fact.

If this, then, is admitted—and we see no escape from it,—we may sum up the results of this computation as follows. As the two jaws of a vise hold an object tightly and firmly in its place, so, in the epochal year of 29 A. D., mainly two outstanding events hold the date of the Crucifixion and with it the date of the first Easter firmly in position. As the construction period of the Temple hemmed in the Crucifixion Passover to the Passover season of 29 A. D., so the lapidation of Stephen narrows down the

earthly ministry of Jesus Christ to the half-year immediately preceding this one and only Passover known to the Synoptics, and fixed this catastrophic Paschal season itself to the spring of 29 A. D. As there can be no intra-ministerial Passover *before* the forty-sixth year of the building of the Temple, so there can be no post-career Passover *after* the first year of the Church's existence, immortalized by the martyrdom of Stephen on the last great day of the feast of Dedication on Tebeth first, Sel. 341, or the twenty-sixth of December, 29 A. D. This memorial to the heroism of a holy man, therefore, limits and confines the entire so-called ministry of Jesus to the six odd months of Sel. 340 (sacred or civil) comprised and comprehended in the one and only fifteenth year of Tiberius Caesar, J. P. 4741-4742 or 28-29 A. D., as almost universally believed and alleged by the Fathers of the ancient Christian Church.

We do not follow the chronological lead of others "in placing this martyrdom of Stephen in the same year as the Crucifixion," but we place it there in obedience to the arbitrament of facts and figures which decide, as Prof. Totten (No. 16, p. 65) puts it, that "that alone is close enough."

By dint of the four data presented in the foregoing argument the limits of the life and labors of Jesus Christ have been narrowed down to approximately half a year, all contained and easily comprehended in the period known as "the fifteenth year of the reign of Tiberius Caesar." But we have not by this means exhausted the process of elimination. By the process of re-calculating the calendar date of each Passover from year to year, that is to say, from the first accession of Pontius Pilate to the procuratorship of Judea in 26 A. D. to the time of his demotion in 36 A. D., we intend to show that all of Pilate's ten years except two are self-eliminating by virtue of the prevailing week-day arrangement as presented by the Jewish calendar for each Passover feast. But before we proceed to the execution of this task itself, we wish to call attention to the character of the factors employed in the calculation of this period.

In the re-calculation of this period of Pontius Pilate's ten years of governorship (or rather, omitting the last four of his years as irrelevant to the subject and as belonging to another lunar cycle), we represent the pertinent *years* to be of the same size and duration as the years in the same zone of every other nineteen-year cycle; to wit, in the belt comprising the fourteenth to the nineteenth years; the months required to equate the Jewish lunar year with the Julian twelvemonth to be inserted as of the same size in the same site as in the other nineteen-year cycles, to wit, three months of thirty days each in the late summer or early fall of the fourteenth, sixteenth and nineteenth years of the lunar

cycle; and the four extra-intercalary days required in each lunar cycle to offset the bissextile or leap-year days of the solar cycle, to be inserted in the first, second, fourth and eleventh years, consequently none in any of the eight years belonging to the lower hemisphere of the Jewish or Syro-Macedonian calendar-cycle. So to prove the correctness of this last assertion and to vindicate the propriety of employing the factors of these calculations as represented in this assertion, we shall now, redundantly we admit, but with a view to satisfying the most exacting critic more abundantly, compute, first, the chronological position of the end of the fourteenth year of the current cycle in the seriation of the Asmonean-Herodian Era, and secondly, the similar location of the end of the nineteenth year of this same third nineteen-year cycle of the Vth Calippic Period, thus ascertaining the exact content of what we may call the possible Crucifixion period.

Taking up the calculation first from the rear, because of its greater simplicity, we have, beside the fraction of a year in 70 A. D., [from Xanthicus or Nisan 1 to Lous or Ab 9, Sel. 382, 128 days], the first nineteen-year cycle of the VIth Calippic Period from 51 to 69 A. D., containing 6940 days, and the full fourth nineteen-year cycle of the Vth Calippic Period from 32 to 50 A. D. (incl.), also containing 6940 days. This would carry us to the breaking point between the third and fourth nineteen-year cycles of the Vth Calippic Period, from which we might conveniently figure either up or down to obtain the Preparation and Passover dates for the years of Pilate's procuratorship from 26 to 36 A. D.

In order, however, to eliminate the last four years of Pilate's procuratorship as early as possible, being posterior to Paul's conversion and therefore ineligible as Crucifixion dates, we shall anticipate this termination of both the Crucifixion period and of the third nineteen-year cycle, by deducting the balance of the Asmonean-Herodian Era from the total amount of days contained in it. Since, then, the pertinent part of the third nineteen-year cycle comes to an end with Adar twenty-ninth, Sel. 343, it is easy to see that the posterior termination of the crucifixion period is definitely fixed $6940 + 6940 + 128 = 14008$ days before the expiration of the Jewish-Roman Era, consequently on the $(85330 - 14008 =) 71322^{\text{nd}}$ day of the Asmonean-Herodian Era. This serial number, being divided by seven, $(71322 \div 7 = 10188 + 6)$ proves that it was a Friday, and, being the 14008th day before the end of the era, equated with the eighty-ninth day of the Julianized Roman year as March thirtieth, J. P. 4745 or 32 A. D.; for, A. D. $69 - 31 = 38$ years, and $38 \times 365 = 13870$ days

13870 days
 9 leap year days
 218 days in 70 A. D.

14097
 -14008

Hence 71322 ..

89 days in 32 A. D.

This equation of Jewish and Julian time exhibits the result our minor calculation must attain, if carried out consistently with the principles of calendar construction, without any attempt at alteration or adaptation. In the same manner, and for the same purpose, we shall now establish the anterior end or the commencement of this same period. We might simply quote the required equation from the former chapter on the date of the Bernicean inscription (see p. 550 ff.), where the last day of the Seleucic year 337, Adar twenty-ninth, was found to be the 69108th day of the Jewish era and the sixty-seventh day of the Julian year A. D. 26. We shall here avoid including the Crucifixion period in our preliminary calculation by adopting the longer process of computing the entire Asmonean-Herodian era from its inception to the end of Sel. 337, the thirteenth year of the lunar cycle then in the making. Equalling the round of ten complete nineteen-year cycles (but for the lack of one lunar twelvemonth of 354 days and one intercalary month of thirty days), the interval between the 148th year of the kingdom of the Greeks and the close of the 337th Sel. would comprise all the years from 164 B. C. to 25 A. D., or 189 years, which, expressed in days, would amount to $(6940 \times 10 =) 69400 - 354 + 30 = 69016$, plus the remainder left in Sel. 148 after the twenty-fifth of Casleu, or $93 + 69016 = 69109$ days, but which, upon the timely recollection of the lapse of one day in 5 B. C. or Sel. 308, is corrected and reduced to 69108 days, from the 25th of Casleu or December twenty-second (exclusive), 165 B. C., to the twenty-ninth of Adar, Sel. 337, in 26 A. D.

Or, working it out in the widest details, multiplying the number of days in a lunar year (354) by 189, adding ten times seven embolismic months (less one in the fourth nineteen-year cycle of the III. Cal. Per.) of thirty days each, together with ten times four extra intercalary days, and topping it off with the remainder of ninety-three days left over in Sel. 148 after the dedication of the temple on the twenty-fifth of Casleu, we have the problem confronting us looking like this:

$$\begin{array}{r}
 \text{Sel. 337} \\
 - \quad 148 \\
 \hline
 354 \times 189 \\
 \hline
 3186 \\
 2832 \\
 354 \\
 \hline
 7 \times 10 \\
 \hline
 70 - 1 = 69 \times 30 = 2070 \\
 10 \times 4 = 40 \\
 \text{Sel. 148} = 93 \\
 \hline
 69109 \\
 - \quad 1 \text{ day lost in 5 B. C.} \\
 \hline
 69108 \text{ days}
 \end{array}$$

from Casleu twenty-fifth, Sel. 148, or December twenty-second, 165 B. C. (exclusive) to Adar twenty-ninth, Sel. 337, in J. P. 4739 or 26 A. D.

In the same manner we obtain the corresponding date in the Julian calendar by computing the number of days in the interval between the dedication of the Temple on December twenty-second, 165 B. C. (exclus.) and the close of the year 25 A. D. on December thirty-first, deducting the sum from the aggregate of days elapsed in the interval between the twenty-fifth of Casleu, Sel. 148, and the twenty-ninth of Adar, Sel. 337. This being $(164 + 25 =)$ 189 times 365 days.

$$\begin{array}{r}
 164 \text{ B. C.} \\
 25 \text{ A. D.} \\
 \hline
 365 \times 189 \\
 \hline
 3285 \\
 2920 \\
 365 \\
 \hline
 47 \text{ leap year days} \\
 9 \text{ days in 165 B. C.} \\
 \hline
 69041 \text{ days}
 \end{array}$$

deducted from 69108, yields sixty-seven days as the balance of time on the Julian side of the calculation.

And since it is evident from a little divisional exercise that the 69108th day of the Jewish Era was the fourth day, or Wednesday, of an unfinished week after an unbroken succession of 9872 sevens, it is equally obvious from a collateral consideration of its relation to the beginning and end of the Era, that the sixty-seventh day of the Julian year 26 A. D. was also a Wednesday,

and therefore marked with the dominical letter A. We take this precaution to insure the correct designation in every case of the week-day character of every Preparation and Passover holiday during the procuratorship of Pontius Pilate now to be computed and to be herewith presented. It needs hardly to be stated that this is done, on each annuary advance, by the addition of the first fourteen and fifteen days of the month Nisan, as it was called by the nativistic or religiously loyal Jews, or of the month Xanthicus, as it was called by those of a modernistic or Hellenizing trend of thought. Thus:

	<i>Jewish</i>	<i>Julian</i>	
69108-08	69108 ..	67	67- 67
14 14	177	177	14 15
7)69122-23	30	30	81- 82=
	177	177	Wed.-Thurs.,
9874+4		451	26A Mar. 22-23, 26 A.D.
9874+5		-365 ds. in 26 A. D.	
69492-92	69492 ..	86	86- 86
14 15	354	354	14 15
15) Sel. 339=			
7)69506-07		440	27GF 100-101=
		-366 ds. in 27 A. D.	Tues.-Wed.,
9929+3			
9929+4			
69846-46	69846 ..	74	Apr. 9-10, 27 A.D.
14 15	177	177	74- 74
16) Sel. 340=	30	30	14- 15
7)69860-61	177	177	
			28E 88- 89=
9980+0		458	Sat.-Sun.
9985+1		-365 ds. in 28 A. D.	Mar. 29-30, 28 A. D.
70230-30	70230 ..	93	
14 15	354	354	93- 93
17) Sel. 341=			14- 15
7)70244-45		447	29D 107-108=
		-365 ds. in 29 A. D.	Fri.-Sat.,
10034+6			
10034+7			
70584-84	70584 ..	82	Apr. 17-18, 29 A. D.
14 15	354	354	82- 82
18) Sel. 342=			14 15
7)70598-99		436	30C 96- 97=
		-365 ds. in 30 A. D.	Tues.-Wed.,
10085+3			Apr. 6-7, 30 A. D.
10085+4			
70938-38	70938 ..	71	
14 15	177	177	71- 71
19) Sel. 343=	30	30	14 15
7)70952-53	177	177	
			31BA 85- 86

	<i>Jewish</i> ..	<i>Julian</i>	
10136+0		455	Sat.—Sun.,
10136+1		—366 ds. in 31 A. D.	Mar. 25—26. 31 A.
71322—22	71322 ..	89	
14 15	30	30	89 89
7)71336—37	1) Sel. 344 = { 1 324	1 } ds. in Sel. 344	14 15
10190+6		444	103—104 =
10190+7		—365 ds. in 32 A. D.	32G Fri.—Sat.,
			Apr. 13—14, 32 A.
71677—77	71677 ..	79	
14 15			79—79
2) Sel. 345			14 15
7)71691—92			93—94 =
10241+4			Wed.—Thurs.
10241+5			Apr. 3—4, 33 A. D.

Addressing ourselves now to the elementary task of seeking out the one particular ephemeris or almanac which has all the qualifications and characteristics required to meet the conditions imposed on this quest by the texts and statements of evangelical history, let us be guided by the directions of an authority in chronological interpretation. Repeatedly Mr. Page (in *New Light from Old Eclipses*, pp. 131 and 183) recites the rule of procedure from Browne's *Ordo Saeculorum* which illustrates the point we wish to impress: "If the year of a given event be doubtful to the extent of six or seven years, but its month-day (in any given calendar) known, and also its week-day, then if upon calculation it can be shown that in one only of the six or seven years the given month-day fell upon the given week-day, the question is solved; if this coincidence took place in two or three, of the given years, the question is narrowed to that extent. This is just the state of the question with which we are here concerned."

By an easy survey of the results here produced we see that, out of a maximum of seven possibilities (the years from 33 to 36 A. D. being ineligible because of preoccupation by exclusive events), there is in all only one year that imposes the fourteenth and fifteenth of Nisan on a Wednesday and Thursday, two (27 and 30) on a Tuesday and Wednesday, two (28 and 31) on a Saturday and Sunday, and two, only two (29 and 32) on a Friday and Saturday. It needs only to be stated as a self-evident fact that only the last two, those emplacing the fourteenth and fifteenth of Nisan on a Friday and Saturday, are in any way susceptible of selection as possible dates for the crucifixion and sepulture of Jesus Christ. Proceeding, then, from the postulate that the burial of the body of Jesus must have followed upon his

death so immediately as to have comprehended the whole of the Sabbath-day in His sepulture or detention in the grave, we deduce from this fact the further inference that, if the fifteenth of Nisan or Xanthicus (which in itself was always and invariably a festival-Sabbath) did not in this case coincide with the week-end Sabbath, it must have fallen so closely into juxtaposition with it as to render it capable of inclusion in the spell of His sabbatic sepulture, which ended with the dawn of the first day of the week. But if, on the other hand, the fifteenth day of the month Xanthicus or Nisan fell unmistakably together with the seventh day of the week, or Saturday, then, of course, the sepulture of Jesus included only the regular Saturday, and His death occurred on the Friday before it. This proviso should preclude the possibility of misunderstanding the verdict of the calendars.

Accordingly the year 26 A. D. (and, by the way, also 33 A. D.) is precluded from all consideration as a possible date, not only because the one, 26 A. D., would date the Crucifixion *before* the mission of John the Baptist and the other, 33 A. D., would see Christ crucified seventy days *after* Saul of Tarsus saw Jesus on the road to Damascus, but because their days of Preparation and Passover on the fourteenth and fifteenth of Nisan, respectively, fell on a Wednesday and Thursday, the fourth and fifth days of the week. The years 27 and 30 A. D. are excluded because their dates for the death and entombment of Jesus fall equally erroneously on a Tuesday and Wednesday. And the years 28 and 31 A. D., although they bring two Sabbath days in close juxtaposition—Saturday and Sunday—must be rejected on that very account, because they appear in reverse order and in flat contradiction to the statements of the gospels that the sepulture of Jesus was not sustained throughout the first day of the week, but was suspended or ended very early in the morning, “on the first day of the week,” which was Sunday. Nor is there a single instance of that contingency to be found, to wit, that of the fourteenth of Nisan falling on a Thursday, which was so fondly and so fatuously championed by Mr. Page and Prof. Totten, that continuity of Sabbatic sepulture which was supposed to protract its length through two whole days of religious rest, the Friday and Saturday of the fifteenth and sixteenth of Nisan. There remain, therefore, only the two possibilities of the years 29 A. D. and 32 A. D., both of which assign the days of Preparation (on the fourteenth of Nisan) and of the Passover (on the fifteenth of Nisan) to the sixth and seventh days of the week; that is to say, to Friday and Saturday respectively.

Yet there are those who attempt to force a mutation of dates to suit their own theory or system of chronology, those who want

to compel the fourteenth of Nisan to fall on a Thursday to favor a Thursday crucifixion and a Thursday-to-Friday, Friday-to-Saturday, and Saturday-to-Sunday night sepulture, and those who want to compel the fifteenth of Nisan to fall on a Friday, in order to procure a feast-day execution of Jesus in fulfillment of an Old Testament type or symbol. How is this done or supposed to be accomplished?

In the former case, for instance, the desideratum (a crucifixion on Thursday) is sought and supposed to be secured by the omission of a day *before*, and the injection of a day *after*, the alleged date of crucifixion, with a consequent shifting of all days between the two alterations. The transposition of the fourteenth of Nisan from a Friday to a Thursday is believed by the author, Mr. Wm. M. Page, followed by Prof. C. A. L. Totten, to have been effected by the interpolation of a thirtieth day of Adar on the twenty-first of February, 30 A. D. By this resort to violence all the intervening days between this posterior date of insertion (Feb. 21, 30 A. D.) and the anterior date of omission (not given) are indeed compelled to equate with the preceding days of the Julian calendar, the fourteenth of Nisan to square with the seventeenth instead of the eighteenth of March, and God only knows how many days before this to the precursory date of the first omission for the advocates of this date for a crucifixion on Thursday, the seventeenth of March, 29 A. D., have failed to indicate this. It is plain, however, from the nature of the case, that there can be no increase by addition in the amount of time subsequent to the crucifixion without a corresponding decrease by omission of the same amount in some antecedent section of the Jewish era. Unless a vacancy has previously been created there can be no convenient site for a chronological wedge to enter in the shape of an intercalation of an extraordinary day.

The same expedient in substance, but applied to the fifteenth of Nisan rather than the fourteenth, is employed by the Rev. Father Matthew Power, author of an *Anglo-Jewish Calendar for every day of the year*. On the similar supposition that the fifteenth of Nisan may be transferred, technically at least, from a Friday to the succeeding Saturday to prevent the imputation of Sabbath violation through bloodshed or any other crime from falling on the Paschal feast-day, and yet allowing a semblance of Nisan fifteenth called "legal reckoning" to remain on Friday, that it might nevertheless be affirmed "that Christ was put to death on a Friday, which was Nisan fifteenth." Thus Father Power (in *Anglo-Jewish Calendar*, p. 81) created a day of Badhu (the mystical name for this extra intercalary day) on "Hesvan 30 November sixteenth, A. D. 30" to prevent the next Passover from falling on Friday, April twenty-seventh to twenty-eighth, 31

A. D., and, also, to prevent the ensuing Pentecostal period from commencing on Saturday as the sixteenth of Nisan, April twenty-eighth to twenty-ninth, A. D. 31. The result is, as Father Power remarks more than once (p. 43, 90–91); not only that there are *two Sabbaths*, a feast-day sabbath and a week-day sabbath, in close proximity, as in the previous theory, but “we have *two fifteenth days* of Nisan, a Friday and a Saturday.” And these two days, both Sabbatarian and both quindecimal, he finds coincident with the twenty-seventh and twenty-eighth of April, notwithstanding the fact that he must obtain this result by dint of an unprecedented procrastination of the Paschal season to the last week of April.

The assertion of Father Power that “the device of Badhu was in full operation in the days of Christ” is by no means in conformity with facts. For one thing there was a Passover of Nisan fifteenth on a Friday, April eighteenth, 67 A. D. (Cal. FE). Besides, there was (much closer home) another fifteenth of Nisan on a Friday, on April thirteenth, 32 A. D. (Cal. G), and still another on Friday, April first, 36 A. D. (Cal. B). On the other hand, there was no vacant site for the insertion of a day of Badhu “Hesvan 30, Th. Nov. 16, A. D. 30 (to prevent the next Passover from falling on a Friday).” If a supernumerary twenty-four hour day had been injected as violently as gratuitously in this place, this action would have necessitated a lapse or suppression of some other twenty-four hour space somewhere else between this arbitrary interpolation of Badhu and the close of the Asmonean-Herodian Era, to make it possible of execution. For, whereas the interval from the close of the thirteenth year (Sel. 337) to the end of the nineteenth year of the cycle (Sel. 343) must be $(71322 - 69108 =) 2214$ days, and, divided by 354, must amount to exactly six years and three months of thirty days each, it is obvious that, where there is nothing left, and nothing lacking, to serve in the character of Badhu, there can be no extraordinary intercalary day of what name or nature soever.

Now, whether it happened by an unaccountable flash of good fortune or by a direct disposition of Providence, or, as it really did, in normal conformity to the simple and consistent workings of the Jewish calendar-cycle, the fact is that the zone of years comprising the twelfth to nineteenth years of its nineteen-year lunar cycles leaves neither a tiny loophole nor a broad avenue of escape for an error of a month or an aberration of a day either to creep in as excess or to drop out as shortage. All the Metonic cycles included in the body of the Jewish Roman Era, from the first nineteen-year cycle of the III Calippic Period to the first nineteen-year cycle of the VIth Calippic Period, are uniform in this respect that the lower zone of years from the twelfth to the

nineteenth year is totally and absolutely exempt and immune from any and every need of complementation or diminution. Nor is there any need of a change or alteration here. If there were a call for correction, history would have to record the cause. But of this there is no trace.

Having thus shown the impossibility of altering the results of our little calculations, partly by means anachronistic and therefore never permissible in the case of the Jewish calendar of the first Christian century, and partly by means of extra-intercalary days perfectly legitimate in their proper places, we shall now return to the verification of their verdict in regard to the two years 29 A. D. and 32 A. D., which alone appeared to be suitable as dates for the Crucifixion.

If an arbitrament of history were needed to decide which of the two years indicated should be discussed and disposed of first, there could not be a shorter and more decisive disposition made than by the testimony afforded in the martyrdom of Stephen. This man, as we have seen, was put to death on the twenty-sixth of December of a year of which the 360th day, the twenty-sixth of December, was said to have been a "Lord's day." Now no other year in the crucifixion period affords such a combination of data excepting 29 A. D. The relation, then, of a crucifixion of Christ in 29 A. D. would be anterior to the stoning of Stephen; the relation of a crucifixion, however, in 32 A. D. would be posterior to that event. It would be fully two years subsequent to the mob-murder of Stephen. It follows, then, that a crucifixion of Jesus in 32 A. D. cannot be considered a matter of fact or an event of history. If there was any such event at all, it must have been an occurrence of the year 29 A. D. It is this year, if any, that is attested the death-year of Stephen and Jesus. And since it is 29 A. D. (not 32 A. D.), which is thus heavily accentuated as the year of the martyrdom of Stephen, the crucifixion of Jesus, and, we may add, the murder of John the Baptist, thus limiting the actual ministry of Jesus to less than six months; we do no more than right if we reserve the discussion of this date to the last, and previously dispose of the later date. We shall, therefore, see first what reasons or considerations may be advanced for the entertainment and maintenance of 32 A. D. as a probable date of the crucifixion.

As it is, the advocates of a long-term ministry of Jesus commencing in the fifteenth year of Tiberius Caesar insist that the later date (32 A. D.) for the crucifixion must be maintained, because the ministry itself lasted three and one half years, and several church fathers affirm that Jesus was slain in the eighteenth year of Tiberius Caesar. It should be noted at once that neither assertion is biblical. The data, however, on which these deduc-

tions rest, are met with in the *Church History* of Eusebius and the writings of Epiphanius. In contravention to the view of the more ancient church fathers that Jesus "began and terminated his ministry in the *fifteenth* year of Tiberius (see Jarvis *Chron. Introduction*, p. 411), the father of confusion in Church History, Eusebius, gave it as his opinion that "Jesus came to His passion in the *nineteenth* year [33 A. D.] of the reign of Tiberius," while Epiphanius places it "in the *eighteenth* year of Tiberius" [32 A. D.]. Enumerating the contemporary consulates and consequently the year-units of Christ's ministry, the latter enregisters them as follows: "After that consulship designated in his thirtieth year there was *another* consulship, called that of the two Gemini, then *another* consulship of Rufus and Rubellio; and thus, *another* consulship intervening *after* the consulship of Rubellio, *finally* came that of Vinicius and Longinus Cassius, so-called, in which the Saviour suffered on the thirteenth before the calends of April (March twentieth)," as said before, "in the *eighteenth* year of Tiberius Caesar" (see Jarvis' *Chron. Intro.*, p. 405 and 410). These private hypotheses, for the first time foisted upon an unsuspecting world by two supposedly honest professors of the faith, seem at first sight to favor the selection of the second possible choice, A. D. 32, as the veritable date of the Crucifixion: but do they really approve of this choice? And do they really commend the judgment and the logical acumen of their Master, in the assignment of such a date for the execution of His purpose?

Without the abashing influence of a single afterthought, the innovating authors of the foregoing computations proceed to stultify and insult their Master in a most shocking manner. They say in effect: Our Lord was over thirty years old when He began to carry out His work of salvation, but He waited unnecessarily until He was thirty-six years old before He acted the part of High-priest and brought the sacrifice of Himself as the victim to redeem His people. They say in effect: He started out correctly enough to proclaim the acceptable year of the Lord while it was current and in course of fulfillment, but He did not pay the price of redemption when it was due and payable. They say in effect: He impersonated indeed the ram of Azazel when He was driven of the Spirit into the wilderness, but He failed to represent the lamb that was to be slain "once at the end of the world," feeding Himself instead on three occasions at least on lambs that were typical of Himself, and drinking the wine that was symbolical of His own blood. They say: He ventured to challenge the temple authorities when it had been forty-six years in building, but He did not dare to offer the temple of His body for destruction until the temple itself was in its forty-ninth or fiftieth year of construction. They say in effect, that Jesus,

though He set out, divinely devoted, to carry out a great plan, He collapsed irresolutely, loitered along, and dilly-dallied from year to year, without determination and without consequent success, until, in a year without symbolical meaning and without spiritual significance, He allowed Himself to be trapped and put to death, much against His will and far removed from His original aim and purpose. Is that a predicament complimentary to the Master?

It seems to us that anyone, whether friendly to the Nazarene or not, would shrink from portraying Him thus, as a reed shaken by the wind, or as a weak man vacillating with the irresolution of despair and indecision. And no one, no matter what his opinion of the purpose of which He was possessed, would presume to think otherwise than that, having once laid His hand to the plough, He would never turn back, or turn aside, until, having masterfully acted His part, He had finished His course in the appointed time, fulfilling His high mission without flinching and without fail.

We are, therefore, constrained to relegate the groundless intimation that the eighteenth year of Tiberius [32 A. D.] might be the date of the Crucifixion to the abyss of oblivion. It is so unfair to the great Master of Nazareth that an indulgence of impatience would be entirely justifiable. Nevertheless we shall control ourselves and see whether we cannot discover a chain of events which shall at once operate toward the elimination of the later date [32 A. D.] and to the proper alignment of the earlier date [29 A. D.] by force of its inexorable concatenation. There is such an one.

From the time when the insignia of royalty had departed from Judah and the last scion of the house of David had failed to receive recognition as a king from the emperor of Rome, there had been introduced into the land of Israel a system of census-taking or tax-collection which recurred at stated intervals with the same remorseless regularity as the tread of a Roman army. It ran quinquennially through the years of Roman overlordship, beginning in the spring of 9 A. D. and ending, so far as the Jewish nation was concerned, in the year 69 A. D. This stream of revenue for Rome, therefore, ran through the five-year lustration periods 14 and 19, 24 and 29, 34 and 39, 44 and 49, 54 and 59, 64 and 69. That it certainly ran through 29 A. D., we have proof; that it ran through 32, we have none. That it ran through 34 A. D., we may be tolerably sure; for we may trace momentous changes in the Jewish commonwealth to this cause (see Jos., *Ant. B. XVIII. C. IV. §6*). But that there was a census taking or "taxing" in the eighteenth year of Tiberius (the only alternative for the "taxing" as well as the taking off of Jesus Christ, there is not the slightest

vestige of evidence, nor yet the faintest coloring of an excuse for one. On the other hand, the spring of 29 A. D., the fifteenth year of Tiberius Caesar, and, on the Jewish side, the month of Adar, Sel. 340, was the regular time, as per schedule, for the tax, as recorded in the gospel (Math. 27: 24–27). This tax, even according to the Rabbins, was due to be paid between the fifteenth and twenty-fifth of Adar (see Andrews, *Life of Our Lord*, p. 363). And the tax in question was not an assessment imposed by the Jewish Church or the ecclesiastical commonwealth of Israel, but a tribute levied by a king, the imperial overlord at Rome. There can be no doubt, therefore, that a real Roman tax, the Latin *census*, a foreign money impost, was meant. And this detestable, offensive, hateful tax was demanded and collected by a contemptible pro-Roman publican, who sat at the receipt of custom, precisely there where the ex-publican Matthew had sat. So it came to pass, in order to leave no vulnerable spot exposed to the shafts of criticism or the misgivings of His disciples, that Jesus here, in Capernaum, brought forth the requisite tax-levy in the form of a didrachma, in the second half of the fifteenth year of Tiberius, which coincided with the consulship of the Gemini and the earlier half of 29 A. D. Whereas, then, the fact is indisputable that this biblical tax-gathering preceded by about one month the very Passover at which Jesus Christ was put to death, it follows as an incontestable conclusion that 29 A. D. is the only year in which the death of Jesus can have occurred. It occurred, not indeed as erroneously surmised by the Fathers of the Church on the twenty-fifth of March, but, as the Syro-Macedonian calendar of the year Sel. 341 reveals, on the seventeenth of April, J. P. 4742 (or 29 A. D.); and not, as the quintodecimans of all ages contended, on the fifteenth of Xanthicus or Nisan, but, as the quartodecimans properly maintained, on Friday, the sixth day of the week, on the fourteenth of Xanthicus or Nisan, Sel. 341 (sacred).

Now, in order that those who are desirous of ascertaining the correct location of the consulate just alluded to may conveniently do so, we submit the succession of consuls during the reign of Tiberius in the following:

Year.	Date A.D.	Consuls.
0	14	Sextus Pompeius and Sextus Apuleius
1	15	Drusus Caesar and C. Norbanus Flaccus
2	16	T. Statilius Sis. Taurus and L. Scribonius Libo
3	17	C. Caecilius Rufus and L. Pomponius Flaccus
4	18	Tiberius Caes. Aug. III. and Germanicus Caesar II.
5	19	M. Junius Silanus and L. Norbanus Balbus
6	20	M. Valerius Messala and M. Aurelius Cotta
7	21	Tiberius Caes. Aug. IV. and Drusus Germanicus III.
8	22	Decimus Haterius Agrippa and C. Sulpicius Galba

<i>Year.</i>	<i>Date A.D.</i>	<i>Consuls.</i>
9	23	C. Asinius Pollio and C. Antistius Vetus
10	24	Ser. Cornelius Cethegus and L. Visellius Varro
11	25	M. Asinius Agrippa and Cos. Cornelius Lentulus
12	26	Cn. Lentulus Gaetulicus and C. Calvisius Sabinus
13	27	M. Licinius Crassus and L. Calpurnius Piso
14	28	Ap. Junius Silanus and P. Silius Nerva
15	29	L. Rubellius Geminus and C. Fufius Geminus
16	30	M. Vinicius Quartinus and L. Cassius Longinus
17	31	Tiberius Caes. Aug. V. and L. Aelius Sejanus
18	32	Cn. Domitius Ahenobarbus and Furius Camillus Scribonianus
19	33	Serv. Sulpitius Galba and L. Cornelius Sulla
20	34	Lucius Vitellius and Paulus Fabius Persicus
21	35	C. Cestius Gallus and M. Servilius Nonianus
22	36	Sextus Papinius and Quintus Plautius
0	37	Cn. Acerronius Proculus and C. Pontius Nigrinus

A peculiar coincidence is all that we intend to point out in this connection. As the death of the most powerful man of his age signalized the consulship of the two Sexti in 14 A. D., so the death of the most powerless of His time and generation distinguished that of the two Gemini. Both men were represented as great—"than whom there could be no greater"—but, while the one is scarcely known by name, the other has been given "a name which is above every name: that at the name of Jesus every knee shall bow, of things in heaven, and things in earth, and things under the earth; and that every tongue should confess that Jesus Christ is Lord, to the glory of God the Father." (Phil. 2:9-11).

While we claim for this coincidence neither force of argument nor semblance of evidence, it may fairly serve as a mark of distinction for the year already pointed out as the undoubted date of the Crucifixion. Its appeal to the succession of consuls makes it an easy means of transition to the discussion of that regnal year of Tiberius which is best known and most highly distinguished as "the fifteenth year of Tiberius, the consulship of the two Gemini." It was thus memorialized in the immortal text of St. Luke's gospel: "Now in the *fifteenth* year of the reign of Tiberius Caesar, Pontius Pilate being governor of Judea, and Herod being tetrarch of Galilee, and his brother Philip tetrarch of Iturea, and of the region of Trachonitis, and Lysanias the tetrarch of Abilene, Annas and Caiaphas being the high-priests, the word of God came unto John, the son of Zacharias, in the wilderness. . . And it came to pass in those days, that Jesus came from Nazareth of Galilee." (Mark 1:9; Matth. 3:13)

That the fifteenth year of Tiberius comprised the latter half of the civil year J. P. 4741 or 28 A. D. and the first half of the civil year J. P. 4742 or 29 A. D., and consequently included half of the consulship of Ap. Junius Silanus and P. Silius Nerva and

half of the consulship of L. Rubellius Geminus and C. Fufius Geminus, thus extending the definition of the fifteenth year of Tiberius Caesar over the second and the first parts of two different consulates or two different Julian years almost equally, is a fact not always present to the minds of people even in the first four centuries of the Christian Era. For this reason nearly all of the ancient church fathers not only give the "fifteenth of Tiberius" as the one year of Christ's ministry and passion but give special mention to the consulate which constituted the second half of the emperor's fifteenth year. Thus Tertullian stresses the time when the sufferings of Jesus were consummated and concluded; "which *passion* was *finished* under Tiberius Caesar, *Rubellius Geminus* and *Fufius Geminus* being consuls, on the eighth day before the calends of April (March twenty-fifth), on the first day of unleavened bread, in which it had been commanded by Moses that at evening they should kill the lamb." (Jarvis, *Chron. Intr.*, p. 378) So Lactantius, the Christian Cicero, says (in the fourth book of his *Divine Institutes*): "Under the empire of Tiberius Caesar, in whose *fifteen year*; that is, *the two Gemini* being consuls, the seventh [eighth!] day before the calends of April, the Jews affixed Christ to the cross." (see Jarvis, p. 379) So Orosius, too, (in the third chapter of his seventh book of History), "speaks of our Lord's passion and of the earthquake and supernatural darkness, as occurring in the *fifteenth* year of Tiberius, that is, in the year *when the two Gemini* were consuls." (cf. Jarvis, p. 384) And so Anastasius, librarian of the Vatican as late as the ninth century, still affirmed: "Our Lord Jesus Christ suffered during the reign of Tiberius Caesar, *the two Gemini* being consuls, on the eighth day before the calends of April (March twenty-fifth)" (Jarvis p. 387).

But not content with merely collating the two descriptions of the same year, a goodly number of the fathers make it a point to prove that this identification of the death-year of Jesus is correct. So St. Clement and Origen prove not merely that the ministry of Jesus consisted of only *one* year, but added the demonstration that this year, counted inclusively, was the forty-second year before the destruction of Jerusalem by Titus in the year 70 A. D. Thus the Alexandrian has it: "And to prove that he must have preached *only one* year, it is also written: He hath sent me to preach *the acceptable year of the Lord*. This is said both by the prophet and the Gospel. The *fifteenth* year of Tiberius, and fifteen of Augustus, make up thirty years, *to the time when he suffered*. And from the time when he suffered, until the destruction of Jerusalem, are *forty-two years and three months*." [forty-one years and three months.]

Origen, another, but later contemporary of Hippolytus, puts

it this way: "To preach *the accepted year of the Lord* is, they say, according to its simple meaning, that the Saviour preached the Gospel *one year* in Judaea." In two other passages, commenting on the long-suffering of God toward the Jewish nation, he says (in his fourteenth homily, upon Jer. 15:15): "If you search out *the times of the passion* [of Christ], *and of the fall of Jerusalem* and ruin of the city, and in what manner God forsook that people when they had slain Christ, you will see that he no longer exercised long-suffering toward them. And if you are willing, listen to this. From the fifteenth year of Tiberius Caesar to the destruction of the temple, *two-and-forty years were fulfilled.*" Replying to Celsus, he affirms the same fact: "For there were *but forty-two years*, as I take it, from the time when they crucified Jesus to the destruction of Jerusalem." (see Jarvis, *Chr. Intr.*, p. 397-8)

St. Hippolyte and Victor of Aquitaine have indicated by the revolution of their respective Easter Cycle and Canon what year they believed to be the correct year-date of the Crucifixion. Thus St. Hippolyte has noted that the passion of our Saviour took place on Friday, the eighth before the kalends of April, or March the twenty-fifth. . . "We cannot state the year of the passion on his testimony," remarks Dr. Jarvis, "but as he agrees with the other ancient writers in naming the twenty-fifth of March as the day, we have a right to infer that he agreed with them also in the year." A Latin translation of the Greek original bears the date "in the thirteenth year of Alexander Severus" (A. D. 235), in the twelfth section of which the author attempts to fix the dates of the several passovers mentioned in the table, the last of which follows: "From the passion of the Lord to the thirteenth year of the emperor Alexander Caesar, the passover has been observed 206 years, being observed by us in commemoration of our Lord Jesus Christ." (see Jarvis' *Chron. Intro.*, p. 394) Hence, if we desired to establish the use of a new Christian Easter Era on the testimony of an ancient Christian writer, we should have a first example in this computation of the true first Christian Easter in A. D. 29 by St. Hippolyte; for 206 years back from the thirteenth year of Alexander Caesar in 234-235 A. D. takes us directly to the fifteenth year of Tiberius Caesar in 28-29 A. D.

In the same manner Victorius Aquitanus (×455 A. D.) has correctly placed the passion of the Lord in 29 A. D. by bringing the *consulship of the two Gemini* into close connection with the *first of the twenty-eight cycles of nineteen years* contained in his *Paschal Canon*.

Making allowance for the error of two years in Roman chronology by reason of which even classical authors ascribed forty-four years of rule to Augustus Caesar instead of forty-two, we find that Julius Africanus, too, is right in his determination of

the date of the passion. Reducing his estimate ($60 - 2 =$) to fifty-eight, we read: "From that time [when the Macedonians ceased to reign] *to the fifteenth year of Tiberius when Christ suffered*, are numbered *sixty years*" [$60 - 2 = 58$], for $58 - 29$ B. C. = 29 A. D. That Africanus meant to designate the consulship of the two Gemini as the year of the Crucifixion is evident from the fact that he compared the "second year of the two hundred and second Olympiad with the fifteenth year of Tiberius Caesar, for, deducting the error of two years, we have:

$$\begin{array}{r} \text{Olymp. } 202^2 = 806 = 30 - 31 \text{ A. D.} \\ - \qquad \qquad \qquad 2 = \quad 2 \quad 2 \quad 2 \end{array}$$

$$\text{Olymp. } 201^4 = 804 = 28 - 29 \text{ A. D.}$$

Finally, St. Augustine and Sulpicius Severus may be cited as having proven by their own way of reckoning that the year of Christ's passion was the consulate of the two Gemini, J. P. 4742 or 29 A. D. "[In the eighteenth year of his (king Herod's) reign], says Sulpicius, "the Lord was crucified, *when Fufius Geminus and Rubellius Geminus were consuls*; from which time to the consul Stilicho [A. D. 400] are 372 years." But Stilicho was consul in 400 A. D. Therefore, deducting 372 years from 400, we obtain as the year in which the consulship of Fufius and Rubellius commenced the year 28 A. D., and as the year when the consulate of the Gemini terminated, the Julian J. P. 4742 or 29 A. D. And as to St. Augustine, the great doctor of dogmatics of the Latin Church, when we consider that he was misguided in his computation by the erroneous enumeration of the consuls, it is not surprising that not only one but two errors must be corrected before we can get his testimony to agree with the facts he believed he was computing. In the first place, the fact that the doctor harmonizes the sixth of Sivan, the day of Pentecost, with the fifteenth of May, and the fourteenth of Nisan, the preparation-day of the Passover, with the twenty-fifth of March, which correspondences occur only in 31 A. D., goes to show that he miscalculated the period to embrace only 365 instead of 367 years, and, following the lead of Idatius and the *Chronicon Paschale* rather than Victorius, added another defect of two consular terms, thus creating a discrepancy of four years, for which allowance must be made. If, then, we deduct a total of ($365 + 4 =$) 369 years from 398 A. D., when Honorius and Eutychianus were consuls, we derive the same traditional testimony from St. Augustine as we do from the majority of ancient church fathers; to wit, that "Christ died, therefore, *when the two Gemini were consuls*, the eighth day before the calends of April (March twenty-fifth)... And by this is collected the very day from which

that year took its beginning, viz., when the Holy Ghost was sent, that is, on the ides of May (May fifteenth). From that time, by the enumeration of the consuls, *three hundred and sixty-five years* are found to have been completed at the same ides (May fifteenth) in the consulship of Honorius and Eutychianus." [A. D. 398] (See Jarvis' *Chron. Intr.*, p. 382)

We have thus shown that, far from its being a forlorn, singular and individualistic opinion, it was rather a very catholic, well-nigh universal conviction that the ministry of Jesus not only commenced but terminated in the fifteenth year of the reign of Tiberius Caesar. To render this conclusion still more sure, we shall now choose two events from the life-time of Jesus, the periodic return of which during the time of His activity, the one in the beginning, the other at its close, could not occur at any other breaking point than when they actually did, that is, during the fifteenth year of Tiberius Caesar.

The first event, already alluded to by Clement of Alexandria and Origen, was the timely recurrence of the Sabbatic year. The regular return of this sacred period of seven years, and with its seventh recurrence, the Sabbatic Jubilee, or year of redemption, was an event which happened, as history tells, at this particular time; the calculable, predictable, and actually-stated period of its recurrence. During the 105 years between Herod's capture of Jerusalem in 36 B. C. and the capture of the City by Titus in 70 A. D., the seventh year occurred fifteen times, the "fiftieth" (strictly $7 \times 7 = 49^{\text{th}}$) year only twice. The first, being the fourteenth year after Herod's investment, occurred in 22 B. C., which was Sel. 291, the second, Sel. $(291 + 49 =)340$, happened in 28 A. D. Look at it from what angle you will, you cannot make the revolution of this seven-year cycle turn out any other date than this, the fifteenth year of Tiberius Caesar or 28-29 A. D. And this is when it happened in the life and labors of Jesus, as Luke says (chap. 4:19).

The other event, culled from the close of the ministry of Jesus, no matter how long or how short we suppose it to be, is the collection of the census or tribute-money which happened about the final departure of Jesus from Galilee. This periodic collection of tribute and taxes, also already alluded to, was quinquennial. The cycle of tax-collections, revived by Augustus after a lapse of forty odd years, and introduced into Judea after the deposition of Archelaus, ran through the years of Rome and of the Christian era like this:—

<i>A.U.C.</i>	<i>Taxing.</i>	<i>A.D.</i>
762	Taxing in Judea under Cyrenius	9
767		14
772		19
777		24
782	Taxing in Galilee under king Herod	29
787		34
792		39
797		44
802		49
807		54
812		59
817		64
822		69

As we are interested in Jewish affairs only, we shall stress, at this time, only the instances of outstanding importance. We need not repeat here how heinously the Jews took the initial taxation by Quirinius, the governor of Syria. Suffice it to say that, while resentment burned fiercely in the hearts of the Hebrew people, "all went to be taxed, every one into his own city." (Luke 2:3). In the same spirit of resentment the Pharisaic party of Christ's day indeed paid their taxes, but, impugning the motives of their opponents in politics as pro-Roman or anti-Semitic, according as they paid their hated tribute with alacrity or the evident lack of it; they manouvered to place their antagonists in the light of pro-Roman or anti-Semitic agitators. Thus the Pharisaic adversaries of Jesus attempted to put Jesus in the light of a reactionary by broaching the subject of tribute and taxes on the last great day of controversy, the Tuesday before His crucifixion. If there had been no campaign in progress to collect the tribute due at that time, there would have been little point to their invidious questions: "Doth not your Master pay tribute? Is it lawful to give tribute unto Caesar or not?" (Matth. 17:24; 22:17) But there was the urgent need of avoiding the appearance of tax-dodging quite as much as the imputation of favoring tax-payments to strangers. It was a year of taxation, which did not recur two or three times during the ministry of Jesus, but only *once*. As Jesus, officiating as High Priest, offered up the sacrifice of Himself, not twice or thrice or a multiplicity of times, even if understood typically, but only *once* at the end of the old Jewish world, so Jesus, as a loyal subject of Rome and patriotic citizen of the province of Syria, paid voluntarily the tribute due to Caesar at the appointed time, and this time, pre-determined by the rounds of the quinquennial taxation periods, recurred as it should do, in the spring of 29 A. D. It follows, therefore, also, that the ministry of Jesus must have terminated in the prime-time of J. P. 4742 or 29 A. D.

If it were necessary to mass and accumulate still more

evidence to the same effect, that the fifteenth year of the reign of Tiberius Caesar, in which Jesus as well as John the Baptist made a beginning of His gospel, agreed in its second half with the consulship of the Gemini in 29 A. D., and therefore represented the ulterior and, at the same time, the utmost time-limitation of His career, it would be easy to adduce additional proof. There would be numismatic evidence to exhibit; such as the coins issued in the life-time of the emperor's mother, Livia, who is said by Tacitus (*Ann.* B. V. C. I) to have died in the consulship of the Gemini, and is borne out by the coinage of her days to have lived only to the thirtieth year of the tribuneship of her son, Tiberius. Now, the series of these tribunitial years commenced on June twenty-seventh, J. P. 4713 or 1 B. C. The thirtieth year of this office, therefore, began on June twenty-seventh, J. P. 4742 or 29 A. D., and extended to June twenty-sixth, J. P. 4743 or 30 A. D., the first half of the tribunitial year covering and so endorsing the second half of the consular term known as that of the two Gemini. As the thirtieth year of tribuneship was current and coincident with the fifteenth year of empire for nearly two months, it is clear that whatever happened in that year before the beginning of that thirtieth year, must have happened in the fifteenth year of the reign of Tiberius Caesar. The Crucifixion, therefore, must have happened in the fifteenth year of Tiberius, and in the consulate of the Gemini 29 A. D.

Then there is the series of years classed as an epoch, rated as one of the greatest eras of antiquity—the years of the kingdom of the Greeks or the Seleucidae. According to this series, which was used and consulted as a correct means of keeping time in Edessa, the king of this powerful municipality appealed to Jesus for the cure of some malady or misfortune, and in return proffered Him the assistance He seemed to need at this particular time. This time was the year Sel. 340. Now, whether we compute this Syro-Macedonian year from its conventional civil beginning in the autumn or from its hieratic sacred beginning in the spring, the immobile section of this 340th year of the Seleucidae is contemporary with the fifteenth year of Tiberius Caesar, and no other. It began, if taken conventionally, on October ninth, 28 A. D., and ended on September twenty-seventh, 29 A. D., if interpreted hieratically, that is, as a sacred ecclesiastical year, it began on March twenty-fifth, 28 A. D., and terminated on April third, 29 A. D. If then, the correspondence between Abgarus V, the king of Edessa, and Jesus of Nazareth, the king of the Jews, was authentic at all, it must have happened at all events before the twenty-seventh of September, and possibly even before the third of April, in either case, in the fifteenth year of Tiberius. If, as has been supposed by Sepp and other commentators, the Greeks

who wished to see Jesus were the emissaries of Abgar V, the very day on which they desired and obtained their interview fell in Passion week, either on Sunday, April twelfth, or on Tuesday, the fourteenth of April, 29 A. D.; consequently in Sel. 340 (civil or secular reckoning). If, on the other hand, the deputies of the king spoke to Jesus on an earlier occasion, say at the sending out, or rather at the coming home of the Seventy Messengers, or even before that, the incident occurred in the immovable months of the year Sel. 340, which synchronize entirely with the fifteenth year of Tiberius Caesar. Under no circumstances can it have occurred before the nineteenth day of August; for, to place that event or any other before that date (reckoning the time hieratically), would take that event or that incident out of the reach of the fifteenth regnal year of Tiberius, and cast it out of the realm of historical facts. So whatever chronological setting or historical substratum this story may have, it places the concluding months or days at least in the second half of the fifteenth year of Tiberius Caesar, and in the first half of the consulate of the two Gemini, A. D. 29.

But supposing the evidence from historic documents and monumental inscriptions to have proven to our entire satisfaction that the ministry of Jesus was confined and limited to one solitary year, and, supposing the calendric arrangements of the years to have demonstrated to the echo which one, and only one, of the years in question could possibly have been "the acceptable year of the Lord," how do the internal events and incidents of Christ's ministry comport with a short term of less than half a year as compared with a term of one and one half, two and one half or three and one half years? How do the matters of fact appear in the light of a few lucid weeks as compared with the dusky obscurity of a number of years?

If we assume (as is assumed by the orthodox branch of the Christian Church) that the Son of God came into the world "to fulfill all righteousness," and, by conforming that fulfillment to the types and symbols as contained in the liturgy of a single but whole ecclesiastical year, to annul and abrogate all the formalities and ceremonies, times and seasons, feasts and fasts, and so forth, as obsolete and antiquated, it must be inferred that this could and would be done in the one-time act and fact of fulfillment, when, beginning in the fifteenth year of Tiberius Caesar, Jesus Himself proclaimed it as a fact that "the time is fulfilled, and the kingdom of God is *at hand*." (Mark 1:15) If, then, at that time, at the beginning of His gospel, "*the time*" is said to be "*fulfilled*," we have a right to expect that the process of fulfillment should not only soon set in, but should soon, presently, be perceived to be completed and consummated, not in a repetition of year after

year, but in the evolution of a single twelvemonth. There seems to exist no reasonable call or provocation why the introduction of the new dispensation should be dropped and the old dispensation prolonged by a continuation in force of the types and symbols supposed to be discarded. This is, in effect, the outcome of every multi-passover theory, that Jesus did not comply with all the postulates of the ceremonial law within a year, but, having failed to reach them all, found Himself compelled to draw upon the future to an indeterminate extent. The effect of this prolongation and extenuation of Christ's ministry is this, that, for instance, two of the great eight-day feasts, the feast of Tabernacles and the feast of Dedication, are several times placed on the same low level of a mere typical character as the many other feasts of Tabernacles and Dedication not even mentioned in Jesus' life. Why there should not even be a casual allusion to these feasts in the first and second years of His ministry cannot be accounted for, except by the fact that such "previous years" did not exist. Obviously the ancient authors of the Church were perfectly right when they concluded, (as bewailed by Dr. Jarvis) "that the period of our Saviour's ministry was *only one year*," knowing "that the fifteenth year of Tiberius, when the two Gemini were consuls, was the year in which, according to general belief, our Saviour was crucified," and, equally so, was the year in which He began the preaching of His gospel, saying, "The time IS fulfilled, and the kingdom of God is *at hand*." We accordingly agree with the Fathers on this point and heartily repeat the assertion that both the beginning and the ending of Jesus Christ's career as the Saviour of His people fell within the limits of one and the same regnal year of Tiberius Caesar, the immortal fifteenth, the famous consulate of the Gemini, 29 A. D.

But, not content with projecting the ministry of Jesus as much as three years into the past, the advocates of a thus elongated ministry take another stride forward in the way of distorting the chronology of this period by locating the scriptural feasts of Tabernacles and Dedication, not in the first year, i.e. *before* the later Galilean campaign, but in the last year, i.e. *after* the bulk of the later Galilean ministry. This makes the situation grotesquely anomalous. It presents the absurd spectacle of the brothers of Jesus impressing on Him the necessity of taking a more prominent place in public notice, after having been virtually reprimanded by these same brethren for making Himself too conspicuous. For, consider. When, by stretching the limits of the ministry of Jesus beyond the biblical bounds of the fifteenth year of Tiberius to a duration of one and one half, two and one half or three and one half years, either before or after that historic date, with the only feast of Tabernacles mentioned in

His ministry misplaced in the last year of said ministry instead of the first, we have the greatest sermon of all time, with the fame of Jesus electrifying the countrysides of all Palestine and Syria a year or two (according to the theory) *antecedent* to this attempt of the brethren to rouse Jesus into action! We have the mission of the Twelve, which surely was an intensified bid for publicity, preceding the imbecile efforts of the brethren! We have the lowering notice of king Herod turned upon Him, and the menacing surveillance of the scribes and Pharisees dogging Him at every step! We have the miraculously fed 5000 enthusiasts for a worldly kingdom wrought up to the pitch of taking Him by force and making Him a king! We even have a duplication of this most effective demand on popularity, in the feeding of other 4000 impressionable men, women, and children! And all these powerful means of attracting and influencing people, superceded and surpassed only by the compounded compression of the *seventy* scouts and messengers dispatched into every nook and corner of the Jewish world, antedating and anticipating the humdrum admonishments of the brethren of Jesus—if a long-term period of preaching and teaching be foisted upon the life-time of Jesus!

If, on the other hand, the so-called Judaeian ministry, (reported only by John) is placed where it belongs, viz. in the year of Tiberius, around the feasts of Tabernacles and Dedication, *before* (not *after*) the late Galilean and Perean ministries, the efforts of the brethren of Jesus will appear perfectly normal and in place. There will then follow thereafter the dreadful flight (Mark 13:18) from Jerusalem (John 11:54) to Ephraim (John 11:54) through Samaria (John 40:4), into Galilee (John 4:3), to settle down in Capernaum, from whence as His headquarters He conducted a whirlwind campaign for the establishment of His kingdom. This almost madding campaign, developing personal performances of unprecedented efforts, such as the Sermon on the Mount, the healing of multitudes, the feeding of thousands, etcetera, involving the mission of the Twelve and the commission of the Seventy, all of which compound campaign machinery was put in operation to convocate the whole congregation of Israel in Jerusalem. In the nature of things, such a campaign cannot, and does not, last longer than a few months at the most. As the greatest political campaigns in the modern world never continue into years, but terminate within a few months, so the religious campaign of Jesus Christ could not, and did not, drag out its time into a second, third, or even fourth year. It was quickly and thoroughly conducted within half a year, and was all over within six months, and these were all included in the fifteenth year of Tiberius Caesar.

Again, when the ministry of Christ is so distorted by its more

or less wholesale expatriation from the fifteenth year of Tiberius, that king Herod does not hear of Jesus until a year or more after the death of John the Baptist, and a further year or two expired before Jesus could appeal to the life of John and the character of John's baptism, it is evident that this violent expropriation of sometimes the larger portion of His career, does violence to both sections of His activity. In the first place, it belittles the assiduity with which Jesus applied Himself to the task of establishing the kingdom of God, the instant John was thrown into prison and all the work devolved upon Jesus. On the other hand, while it thus underrates the agility or working ability of Jesus, it also minimizes the fury of the woman criticised who required a whole year to devise a plan by which she could get the head of John delivered to her on a platter. Yet hell they say has no deadlier weapon in its arsenal than the hate of a woman scorned, nor a swifter-flying carrier of destruction than wrath.

While we are speaking of the damage done to the reputation of Jesus as a founder and promoter of the kingdom of God, we may mention two more very notable examples of injury to men's names and characters by the unwarranted prolongation of the ministry of Jesus. The first of these is the case of Nicodemus. It is due entirely to the displacement of a large section of St. John's gospel that the mention of Nicodemus for the first time is divided from the second by the gulf of a one, two, or three years' interval, according to the length to which this intermission is protracted by the hypothesis brought into play. This unusually brave and aggressively good man desired to have a talk with Jesus the day after the cleansing of the Temple, at a time when Jesus was overrun by adverse critics and hostile inquisitors. It was the day when Jesus had appealed to the high calling of John and the character of his baptism, consequently on Tuesday, the third day of the week. Seeing that he could not hope to have a quiet conversation in the din and turmoil of that day, he sought and obtained an interview by night. Because of this circumstance, and because of the artificially long-drawn-out intermission between this nocturnal visit and his next appearance as the bold solicitor of Jesus' body, Nicodemus has been shamelessly maligned as a timid pretender and cowardly professor of the faith in Jesus. The fact is, that he was a more courageous follower of the crucified Christ than his traducer, St. John. With the exception of Joseph of Arimathea, Nicodemus was the only man among the disciples of Jesus who was brave enough, after the shame and disgrace of the Crucifixion, to "go in boldly unto Pilate and crave the body of Jesus" (Mark 15:43).

The other example of palpable injustice through exaggeration resulting from the overstretching of the ministry of Jesus is that

of Judas Iscariot. It is true, it is the case of a self-confessed criminal. Possibly he was a thief (as alleged by the author of the fourth gospel) as well as a traitor. The only thing that seemed to be lacking was the wherewithal to make him a thief. But be that as it may, a long-term ministry of Jesus unjustifiably extends the period of his villainy sometimes as high as two years over and above the limit of facts. The traitor was probably a native of Kerieth in the Hauran [Auranitis] or of Kartha in the province of Galilee, like Judas of Galilee (famed for his revolt in the days of the taxing, Acts 5:37), a fiery patriot of the Zealot type. He was not one of the first seven disciples, who accompanied Jesus from the beginning, throughout His Judean and Samaritan ministry, and up to the avowed selection of the Twelve. So he must have been picked from the great multitude that followed Jesus (Mark 3:7.8) "*from Galilee, and from Judaea, and from Jerusalem, and from Idumea, and from beyond Jordan.*" It, therefore, cannot have been much over two months that Judas, the excitable super-patriot, attached himself to Jesus as a fervid promoter of a presumably worldly kingdom, through thick and thin, come hell and high water. If Judas lived a lie under the eye of Jesus, and Jesus was deceived by him, it was not for a period of two *years* or more, but, at most, of two *months* or even less. It was a crime, no doubt, which he committed, but a crime rendered high and holy in his estimation by the aureole of patriotism. Not that he loved Jesus less, but that he loved Jewry more. But the point of the whole argument is this; that there is no need of painting the devil black. Give the devil his due, and let it go at that.

Among the assemblage of persons and things wholly or in part misrepresented by a trick-mirror enlargement of the career of Christ to the extent of one and one half, two and one half or three and one half years, we might also mention the disciples and later apostles of Jesus Christ, who, according to whatever theory is advanced, labored under a load of uncomprehended and misconstrued sayings of Jesus for one, two, and even three solid years. Such a burden of stupidity is, however, not chargeable to the men of Galilee; it is imposed on them by the make-believe mirage of a long-term ministry. Thus, the dark saying attributed to Jesus: "Destroy this temple, and in three days I will raise it up" (John 2:19) was not spoken by Him in the forty-third, but in the forty-sixth year of temple construction, and not *three years*, but only *three days* before He was laid low, and another *three days* before He expounded to two of His disciples "in all the scriptures the things concerning Himself." (Luke 24:27) Being recorded as having been spoken on Monday, the second day of the Passion week, April thirteenth, 29 A. D., it was no

display of a long memory, or a remarkable feat of mnemotechnic ability, performed by the suborned witnesses against Jesus to recall this dark saying on Friday, the seventeenth of April, 29 A. D. Like all of His three predictions of His death (Mark 8:31; 9:30-32; 10:32-34), the first not more than a month, the last less than two weeks before the event, this obscure intimation of His death was "at hand" or "nigh" unto realization when He made it. It was incomprehensible, not because of the obtuseness or thick-headedness of the disciples, but because of its unexpected and unforeseeable character.

Returning now again to the feast days observed by the Jews during the ministry of Jesus, and permitting, for instance, the feast of Dedication to retain its historic position in the fifteenth year of Tiberius Caesar (from the twenty-fifth of Casleu, Sel. 340, or December thirty-first, 28 A. D., to the first of Tebet or the sixth of January, 29 A. D.), thus enabling the early Galilean ministry to precede, but the later Galilean to follow, the Judean and Samaritan "ministries," we shall find it perfectly natural for the enemies as well as the friends of Jesus to demand: "How long dost thou make us to doubt? If thou be the Christ, tell us plainly." For, in this case, the historical emplacement of the Dedication-feast holds good chronologically and geographically. Chronologically it presupposes an early Galilean activity, productive of a few conversions and a limited number of miracles. It postulates, too, an apparent lack of success and a revulsion of feeling against the would-be Messiah in Jerusalem. An assault and battery with stones, or, at least, a threat of lapidation, puts an end to His activity in Judea. His consequent flight "in the winter" (Mark 13:18) from Jerusalem and Bethany to Ephraim connects beautifully with His passage through Samaria, and so delineates the itinerary of Jesus with topographical nicety. From Samaria He re-enters Galilee, settles down in Capernaum as His headquarters, and from there conducts His strategical circuits for calling men into His kingdom. Thus properly joined and pieced together, the "Hegira" of Jesus is no longer a jig-saw puzzle or crazy-quilt pattern, but a rational line of travel, however arduous and dreadful it was because "it was winter" (John 10:22). This winter, of course, being the only one in the memory of Jesus when He advised His disciples to pray for deliverance from winter travel, and the only one mentioned by any evangelist, was admittedly the winter preceding the Passover of His passion, consequently, in the fifteenth year of Tiberius Caesar, 29 A. D.

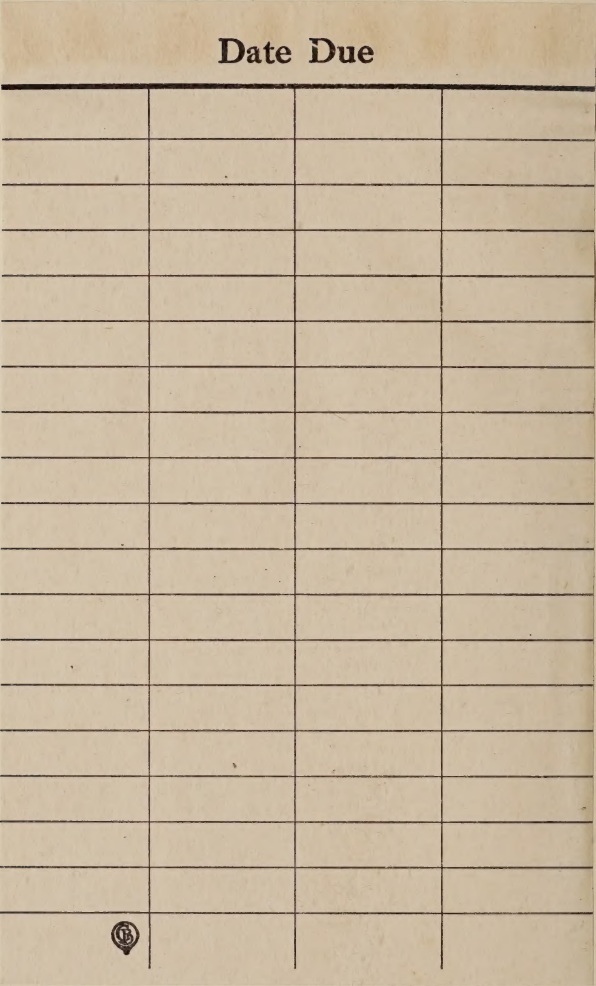
In this way, we could increase and multiply the instances of greater probability to be found in the historical brevity and compactness of the Lord's work in the fifteenth year of Tiberius

Caesar. The compression of events into a comparatively small space of time is not more forced than the force of their evolution required. The facts themselves responded rapidly to the energy of His will and the intensity of His campaign. A brief career, it is true, may look over crowded and crammed to fulsomeness, but, after all, it is not more congested in reality than called for by the account of facts. Not only is it true, as admitted by Prof. Rhees, that all that is told us in the four gospels would cover but a small fraction of time," but the select instance of one busy day in Capernaum, as recorded in Mark 1:21—34, is sufficient evidence to show that a hustling and bustling activity on the part of Jesus was the outstanding characteristic of His life in Galilee. There was no room for languid ease and luxurious laziness in His campaign. "Hurry marks all the movements in the ministry of Jesus," as Alex. Robinson remarks in his *Study*, p. 83), so that this ministry of His did not require years or even months to bring results. "Within a few *weeks*," says Wilson (in *Christ We Forget*, p. 144), "He became unchallengeably the most prominent personage in the land." And not only the most prominent, but also the most persecuted and opposed. It did not take the established clergy a twelvemonth to discover that there was danger to their craft in His revolt against them, nor did it take them years and years to bring Him to time. Within the three months of His Galilean campaign, they discredit Him with the people, drive Him repeatedly from the country, and, upon His coming back to rally the nation around Him once more, dog Him finally to the cross. There is no room for "plots and schemes that were, perhaps, going on for *years*" (as Neander, *Life*, p. 397, supposes). Their logical acumen is too keen, as their conscience is too dull, to require a long stretch of time to develop a plot. Their plot thickens fast, as the plan of Jesus materializes fast. Yet a few days, Jesus tells the Pharisees, as He goes through the cities and villages, teaching, and journeying toward Jerusalem, I do cures today, and tomorrow, and the third day I shall be done. And so the career of Jesus comes to a close in the fifteenth year of Tiberius Caesar, this being "the accepted time" (Luke 4:19), and the only time needed "*once* in the end of the world to put away sin by the sacrifice of Himself." (Hebr. 9:26).

Nisan 14-15th		Jewish—	Julian.		
69108-08		69108 ..	67		67- 67
+ 14 15		177	177		14 15
7)69122-23	14. Sel. 338 =	30	30	d. in Sel. 338	
		177	177		
9874+4-5			451		A Wed.-Thurs., Mar. 22- 23
			-365	d. in 26 A. D.	
69492-92		69492 ..	86		86 86
14 15	15. Sel. 339 =	354	354	d. in Sel. 339.	14 15
7)69506-07			440		100-101 =
			-366	d. in 27 A. D.	GF Tues.-Wed., Apr. 9- 10
9929+3-4					74 74
69846-46		69846 ..	74		14 15
14 15	16. Sel. 340 =	177	177	d. in Sel. 340.	
7)69860-61		30	30		88- 89 =
		177	177		E Sat.-Sun., Mar. 29- 30
9980+0-1			458		
			-365	d. in 28 A. D.	
70230-30		70230 ..	93		93 93
14 15	17. Sel. 341 =	354	354	d. in Sel. 341.	14 15
7)70244-45			447		D 107-108 =
10034+6-7			-365	d. in 29 A. D.	Fri.-Sat., Apr. 17 18
			82		82- 82
70584-84		70584 ..	354	d. in Sel. 342.	14- 15
14 15	18. Sel. 342 =	354			C
7)70598-99			436		Tues.-Wed., Apr. 6- 7
			-365	d. in 30 A. D.	71- 71
10085+3-4			71		14- 15
70938-38		70938 ..	177		85- 86 =
14 15		177	30	d. in Sel. 343.	Sat.-Sun., Mar. 25- 26
7)70952-53	19. Sel. 343 =	30	177		
		177			
10136+0-1			455		
			-366	d. in 31 A. D.	
71322-22		71322 ..	89		89- 89
14 15		30	30		14- 15
7)71336-37	1. Sel. 344 =	1	1	d. in Sel. 344.	103-104 =
		324	324		Fri.-Sat., Apr. 13- 14
10190+6-7			444		
			-365	d. in 32 A. D.	G
71677-77		71677 ..	79		79- 79
14 15		30	30		14- 15
7)71691-92	2. Sel. 345 =	1	30	d. in Sel. 345.	93- 94 =
		324	1		Wed.-Thurs., Apr. 3- 4
			324		

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10241 + 4 - 5				F	
		434			69 - 69
		-365 d. in 33 A. D.			14 - 15
72032 - 32	72032 ..				
14 15	177				83 - 84 =
3. Sel. 346 = {	30	69			Mon. - Tues.,
7)72046 - 47	177	177			Mar. 24 - 25
		30	d. in Sel. 346.		
10292 + 2 - 3		177			
					88 - 88
		453		E	14 - 15
72416 - 16	72416 ..	-365 d. in 34 A. D.			
14 15	30				102 - 103 =
4. Sel. 347 = {	1				Sun. - Mon.,
7)72430 - 31	324	88			Apr. 11 - 12
		30	d. in Sel. 347.		
10347 + 1 - 2		1			
		324			
				DC	77 - 77
72771 - 71	72771 ..	443			14 - 15
14 15		-366 d. in 35 A. D.			
5. Sel. 348					91 - 92 =
7)72785 - 86					Fri - Sat.,
10397 + 6 - 7		77 d. in 36 A. D.			Apr. 1 - 2

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